Midterm: How Do People Respond to the Elecoral Promises?

David Sichinava, Rati Shubladze

December 7, 2017

Instruction

Follow the assignment step-by-step. Name your *.rmd* file *your_surname_midterm.rmd*. For example,

```
sichinava_midterm.Rmd
```

We've noticed that often people just simply type the code and add almost no interpretation to their analysis. In the midterm, we will evaluate how you make judgements based on data and interpret the results of the analysis.

Background to the Assignmnet

This assignmnet is based on a recent article by Turmanidze (2017) which investigates how voters in Armenia and Georgia respond to the policy promises made by politicians. Specifically, the author analyzes whether ambiguous and contradictory promises increase the likelihood of voters to vote in elections. To put it even more bluntly, whether people may be fooled by the controversial campaign promises.

Indeed, the investigation of the causal mechanism behind the proposed hypothesis requires an experiment. In this assignment we analyze the results of one of the experiments described in Turmanidze's paper. The respondents were asked to assess the chances whether a hypothetical person named Givi would vote in national elections. However, the assessment was done after the respondents were presented three randomly assigned different stories about a new political party which campaigned in Givi's village. In the first case, the party would promise high taxes and increased government investment, in the second case the party would campaign for decreased taxation and private investments; in the third case the party would stood for decreased taxation and increased government spendings (an inconsistent and unrealistic promise). Fourth group of respondents did not receive any treatment and was used as a reference control group. Ideally, these different stories would trigger different assessment of Givi's likelihood of voting in elections.

Below you can find the detailed description of variables and respective categories. Apart from the experiment, Turmanidze also collected information abouth the economic condition of respondents, their political knowledge and some demographic characteristics.

Table 1: Variable Description

Variable	Definition
age	Respondent's age
sex	Respondent's gender (1=Male, 2=Female)
q28	What is the most powerful political position in Georgia (1-correct, 2-incorrect)
q29	Respondent can name a member of ruling Georgian Dream member party
q30	Respondent knows who is the supreme commander of the army
q31	Respondent knows who must approve state budget
q32	Respondent's level of attained education (coded on a five-point scale: 1 - lowest, 5 - highest attainment)
q40_1	Household owns air conditioner (1-yes, 0-no)
q40_2	Household owns a car (1-yes, 0-no)
q40_3	Household owns a washing machine (1-yes, 0-no)
q40_4	Household owns a smartphone (1-yes, 0-no)
q40_5	Household owns a computer (1-yes, 0-no)
exp	Experimental groups (1-control, 2-high taxes and government investments, 3-low taxes and private investments, 4-low taxes and government investments)
q16_part	A five-point scale of the respondents assessment whether a guy like Givi would vote in elections. 1 means that Givi would absolutely not vote in elections, whilst 5 denotes that Givi by all means would get out and vote.

Data Management

First of all, create a new notebook and read the data to R. Do not forget to indicate the working directory. Download your data from dropbox or directly from this link: https://goo.gl/2k1rBm. Read the downloaded *.csv* file to *r*. Name the new data frame *midt*.

Create a new variable *agegroup* from the initial variable *age*. This variable should have three categories: one for the respondents aged 18-35, another for those 36-55 years old and another for those who are 56 or older. Make *agegroup* variable factor and attach corresponding labels to the variable.

Attach labels to the variable *sex*. Note that 1 here means *Male* and 2 denotes *female* participants.

Attach labels to the variable *exp*. Remember that *exp* indicates to which experimental or control groups were the respondents assigned. Consult table 1 to identify the groups and their respective names.

Now, calculate political knowledge score. Knowledge score is a summary index of correct answers to questions *q28*, *q29*, *q30*, and *q31*, that is, if the respondent answered to the question correctly, he or she would get one extra point on the index scale. As the result, the most knowledgeable respondent would have score 4 whilst the least knowledgeable would get 0. Note that the dataset sometimes contains missing data in our variables of interest, therefore you should consider the following code:

```
midt$knowledge <- 0
### !is.na tells R to ignore missing values during the calculation process

midt$knowledge[midt$q4_1 == 2 & !is.na(midt$q4_1)] <- midt$knowledge+1
```

Next you've got to calculate a proxy measure for respondents' economic conditions. Usually, political scientists use a simple additive index of items owned by the household. In our case, respondent's economic condition index would be the sum of the answers to questions $q40\_1$, $q40\_2$, $q40\_3$, $q40\_4$, and $q40\_5$. Higher the score, more well off the respondent is.

Descriptive statistics

Calculate summary statistics for questions measuring gender, age, political knowledge, the perceived willingness of Givi voting in elections, the household's economic condition score, education level and the variable denoting the experimental intervention. Give a short interpretation of your results.

Explore your data

Examine how female and male respondents differ in terms of political knowledge, their economic conditions, education level and their assessment of Givi's whereabouts. Give a short explanation to your results.

Political knowledge is an important factor which often perfectly predicts one's political attitudes. Examine whether there is any difference among people with different political knowledge in terms of education level and their economic situation. Give a short explanation to your results.

Is there any correlation between the respondent's political knowledge and his or her level of attained education? Give a substantial explanation.

Finally, let's analyze the results of the experiment. The goal of the experiment was to show whether unrealistic policy promises (like those given in the third experimental intervention) had any impact on Givi's perceived participation in elections. What does the data tell us? Is there any difference between experimental and control groups? Examine mean values and the standard deviations for each group. Give a short meaningful explanation to your results.

Submission

Zip the *whole folder* for the midterm. Name the file according to the following format: *surname_midterm.zip*. Upload the file to Dropbox which could be accessed through this link or by typing the following link to your browser: https://goo.gl/ngHSvo

Please submit your assignmnet by **23:59 Wednesday, December 13th** only via the link indicated above.

We wish you good luck!

Dato & Rati