Writing Assignment 3

1 Instructions

- This writing assignment is due on November 10 by the beginning of class.
- Hopefully, you can have the computation (Part 1) done by November 3, so that we can spend a couple of class periods talking about the writing and answer any questions you might have about the code.
- Plagiarizing prose or code is not acceptable.

2 Background

This question is based on a paper by Joshua Kalla and David Broockman forthcoming in the *American Journal of Political Science* titled "Campaign Contributions Facilitate Access to Congressional Officials: A Randomized Field Experiment." You can find the paper here.

3 The Experiment

The question that Kalla and Broockman are interested in is: Do campaign donors receive access to higher-ranking officials?

Kalla and Broockman describe their experiment as follows:

> The experiment was embedded in a political organization's effort to build support for a bill before Congress to ban a chemical. The organization, CREDO Action, is a U.S. liberal political organization with around 3.5 million members. It attempts to arrange meetings between its members and their legislators from time to time, although prior to the experiment it had never discussed its members' donation history in these invitations. The sample for the experiment included every U.S. representative of one political party who had not already cosponsored the bill—191 representatives in all.
>
> For the experiment, in each of these 191 congressional districts, the organization first secured agreement from around a dozen organization members who had previously donated to political campaigns to attend a meeting with their legislator's office. Members of the political organization who had donated were recruited via e-mail and informed that their previous contributions might be revealed to the office of their members of Congress when the meetings were requested.
>
> Before the organization attempted to arrange the meetings between these campaign donors and the offices of their members of Congress, the offices were randomly assigned to one of two experimental conditions, a Constituent condition and a Revealed Donor condition.

Based on the random assignment, CREDO Action sent the scheduler in each legislator's office a version of the following e-mail:

> SUBJECT: Meeting with local **[campaign donors/constituents]** about cosponsoring bill to [BILL DETAILS]?

BODY:

Hi [SCHEDULER],

My name is [EMPLOYEE] and I am an Organizer with CREDO Action. Around a dozen of our members near [DISTRICT CITY] who are **[active political donors/concerned constituents]** have expressed interest in meeting with the Congressman, in person or by phone from the [CITY] office.

These [donors/members] are extremely concerned by [DETAILS ON BILL] and would like to tell the Congressman why his base would like him to cosponsor H.R. [BILL DETAILS]. This legislation would [DETAILS ON BILL]. They very much hope that the Congressman will cosponsor the bill.

If the Congressman is not available, they'd like to arrange a meeting with the chief of staff, LA, or local district director, in person or by phone from your office.

Could we arrange such a call on [DATES]? Our members are looking for just 30 minutes to have their concerns and ideas heard.

Looking forward to hearing from you on what time might work well and who our members can expect to meet with.

Thanks in advance,

[EMPLOYEE]

If the organization did not receive a reply within three business, days it sent the following follow-up e-mail:

Hi [SCHEDULER],

My name is [EMPLOYEE] and I am an Organizer with CREDO Action. I am following up on this meeting request I sent you last week.

We're attempting to hold these meetings on [BILL] with Members of Congress from across the country. Please let me know if we could schedule this meeting. We are hoping for sometime around noon on [DATES].

Thanks, and hope to hear from you soon.

Best,

[EMPLOYEE]

If the the organization did not receive a response after this second e-mail, then it did not follow-up any further.

For each potential meeting, Kalla and Broockman noted whether a meeting was held and the rank of the official that attended the meeting, ranging from no meeting at all to a meeting with the Congresswoman herself.

Data and Variables

There is just one data set for this assignment, `donor-access.csv` available here, and it has only two variables. Table 1 describes the variables.

Variable	Description
`donor`	a variable that equals 1 if the Congressional office received the donor treatment and 0 if it received the constituent treatment
`staff-rank`	a variable indicating the rank of the official that met with the group: 5 indicates the member of Congress, 4 indicates the Chief of Staff, 3 indicates the Legislative Director or Deputy Chief of Staff, 2 indicates a DC-based legislative assistant or local district director, 1 indicates another district-based staffer, and 0 indicates no meeting at all.

Table 1: Names and Descriptions of the variables in `donor-access.csv`.

4 Part 1: R Script

Create a new project directory for this assignment. Call it `writing-assignment-3`. You'll want to set your working directory to this folder when working on this assignment.

```
writing-assignment-3
|-- data
   |-- donor-access.csv
|-- doc
   |-- figs
|-- R
```

Create an R script called `donor-access.R` and save it to the `R` subdirectory. This script should automatically save all the figures to the subdirectory `doc/figs`–make sure to choose the filenames of the figures carefully. The script `donor-access.R` should do the following:

1. Load the Kalla and Broockman's data.
2. Use the `table()` function to create a table of the ranks of the officials attending the meetings for each experimental condition. Make sure that the experimental condition is in the rows and the ranks are in the columns.
3. Use the `prop.table()` function to calculate the proportion of each condition that received each a meeting with each rank. Supply the argument `margin = 1` to make sure the rows add to 1. It is convenient to multiply this table by 100 to convert the proportions to a percent. It is convenient to round this table to the nearest whole percent using the `round()` function. Take a look at this table and make a mental note of whether "active political donors" get more access to higher ranking officials than "concerned constituents."
4. A problem emerges. What we really care about is the proportion of the each condition that does *at least as well as* a meeting with an official of a certain rank. But it is hard to gather than information from the table we just made. I created an R function that will calculate these quantities.

```
# create a function to calculate the reverse cumulative proportion
reverse_cumulative_proportion <- function(treatment, outcome) {
  prop <- prop.table(table(treatment, outcome), margin = 1)
  rc_prop <- matrix(NA, nrow(prop), ncol(prop))
  rownames(rc_prop) <- rownames(prop)
  colnames(rc_prop) <- colnames(prop)
```

```
  for (i in 1:nrow(prop)) {
    rc_prop[i, ] <- rev(cumsum(rev(prop[i, ])))
  }
  return(rc_prop)
}
```

For each condition indicated by `treatment` this function calculates the proportion that have an `outcome` greater than each value of `outcome`. For example, the reverse cumulative proportion for no meeting is 1.00, because all values are greater than or equal to zero. Use my function to calculate the proportion of each condition who received a meeting with each rank or higher. Again, it is convenient to convert the proportions to a percent and round this table to the nearest whole percent. Take a look at this table and make a mental note of whether "active political donors" get more access to higher ranking officials than "concerned constituents."

5. There are two ways to include these results in your paper. First, you might make a neat table using Word (or some other software). Second, you might turn these tables into a barplot using the `barplot()` function. Experiment with barplots to see if you can make one you like better than a table. If you want to do something in particular, but can't figure it out, ask in class and we can talk about it together.

5 Part 2: Essay

Clearly divide the essay into numbered sections (as this assignment is divided into three sections). Give each section a nice name. For example, don't call the first section "Section 1." Instead, call it something like "1 Money in Politics." Section 1 should correspond to the first question, section 2 should correspond to the second question, and so on. While you should be creative with the style of the title, headers, etc, make the paper look professional.

Length is not important. You should, though, try to address the questions completely and compactly. Focus on the quality of the words, not the quantity. I think 500-1,000 words should be sufficient. Remember your audience—a smart person who is not be familiar with or interested statistics or this particular study, but cares about politics. It's your job to clearly and accurate explain these results in a way that's meaningful and interesting to the target audience.

1. Explain the potential negative consequences of money in politics. Why might we care if donors have greater access to officials? If you want your readers to care about the numbers coming later, you have to make them care about the concepts those numbers represent. Feel free to do a little background research or offer some of your own background knowledge, but be sure to cite sources to back up your claims.
2. Clearly explain Kalla and Broockman's experiment in your own words. I provided a rough overview above. If you have questions about any particulars, I refer you directly to their paper. You should provide enough details so that a smart reader understands the results without knowing a lot about statistics or this particular study. Be sure to explain how they randomize and why that is important.
3. Discuss the results of the study. I want to give you more flexibility for this assignment. I'll let you decide whether to use a table or a bar plot. You should use at least one of the two and it should look great. I do suggest discussing the percentages first and then the reverse cumulative percentages second. Do you find evidence that donors receive greater access? Are these effects substantively large?
4. Lastly, write a conclusion. You have some room for creativity here. Usually, you want to highlight the takeaway point for your reader.

Any sources that you rely on should be cited. See the APSA style guide (pdf) for the details on how citations typically work in political science. You can see this paper of mine (pdf) for an example. There is no need to include an abstract. For this particular, project you'll want to at least cite Kalla and Broockman's paper.

6 Turning in Your Assignment

Compress the project folder `writing-assignment-3`. It should now be `writing-assignment-3.zip`. Rename this file `lastname-firstinitial-wa3.zip`. E-mail this compressed file to Abhi (abhisekh@exchange.tamu.edu) and me (crainey@tamu.edu) by e-mail. Also, submit the paper to through Turnitin. You can find the link on the eCampus sidebar. Lastly, bring a hard copy of the paper to class with a print-out of the R code (i.e., File → Print in RStudio) stapled to the back.

7 Grading

- R Code: 50%
  - The code runs and computes the correct quantities: 40%
  - The code is neatly written and thoroughly commented: 10% (Remember that I have to read it! See Hadley's style guide for some suggestions.)
- Paper: 50%
  - Analysis: 20%
  - Grammar and usage: 20%
  - Spelling and punctuation: 5%
  - Organization and format: 5%