Writing Assignment 1 – Polisci 209

Writing Assignment 1

First Draft due on October 5th, Final Version due on October 15th

For this assignment you need to download and analyze two different data sets from the syllabus website. They are posted under Week 5, Friday September 28. The first data set is the NOMINATE data file. Here is a link to the data: http://fhollenbach.org/Polisci209_2018/slides/week5/nominate.csv. This data set contains the following variables:

1. congress – this is the session of Congress for which the data is recorded
2. state – this variable records the state the lawmaker is from
3. congressional_district – this variable records the congressional district for a given observation
4. party – this variable records the party id of the member in this observation
5. name – this variable records the name of the member of Congress for this observation
6. ideology_score – this variable is the NOMINATE score for a member of Congress for the given year

These data include ideology scores from the 100th through the 114th Congress (only the House is included, but the same data exist for the Senate). Ideology is measured using the voting record of each member of Congress and is known in political science as the first dimension of the **DW NOMINATE** score. It was originally created by Keith Poole and Howard Rosenthal. More negative scores on this scale indicate more liberal members of Congress and more positive scores indicate more conservative members. Here is an example of an article where the DW NOMINATE scores are used:https://fivethirtyeight.com/datalab/ the-house-and-senate-are-the-most-divided-theyve-been-in-our-lifetimes/.

The second data set contains similar ideology scores for legislators from all 50 state legislatures from 1993 to 2014. Here is a link to this data set: http://fhollenbach.org/Polisci209_2018/slides/week5/state-legislators.csv. This data set contains the following variables:

1. legislator_id_number – an id number for each individual legislator in the data
2. party – this variable records the party id of the member in this observation
3. state – this variable records the legislator's state
4. year – this is the year for which the data is recorded
5. ideology_score – the ideology score for that lawmaker in the particular year

To begin, you should read in both data sets and take a look at your data. For example, use the `head()` function.

For this writing assignment, you must describe the data in the Nominate dataset and how ideology scores in Congress for each party developed over time. In addition, you should pick **one** of the states from the state-legislator data set and describe ideology for each party in that state over time (Please look outside of Texas). Try to compare the national development over time to the development over time in your state.

First, you should start by explaining the time period covered in each data set (i.e., which Congress was in session when and the years for the state data). Next, you should have a short section explaining what the measure of ideology is, i.e. what is a DW NOMINATE score and where does it come from? You are allowed to use this source to do some research about the ideology scores: https://en.wikipedia.org/wiki/NOMINATE_ (scaling_method). Make sure you provide citations for any outside sources you use, even if it is the text book (if you are unsure how or when to cite, see: http://library.tamu.edu/services/library_tutorials/citing_ sources/index.html). I prefer you use APA style, but any of the ones listed on the library site are fine.

Once you have explained the measure of ideology used here, you should go on to describe the data. You should first talk about the federal data and your chosen state separately. You can use the `summary()` function to get summary statistics of variables and subsets of the data. Or you calculate mean, standard deviation using the `mean()` and `sd()` functions. In addition to these statistics, you should provide plots (e.g. histograms

or scatter plots). Make sure you discuss each plot that you put in your paper extensively. Use the statistics and make plots for subsets of the data to provide an understanding of the data at hand and the development over time for both parties. You should describe both the general location (e.g. mean) of ideologies for both parties over time, as well as the spread. Again, do this for the data at the federal level and your state.

Lastly, you should compare the development over time in your state to that at the federal level. Try to calculate a measure of polarization for each Congress and year. Calculate the correlation between polarization at the federal and state level for those years for which you have data on both. What does the correlation say?

General Guidelines: Great assignments will be clearly and concisely written, have very few grammatical or spelling errors, and will describe plots and statistics in detail. Write as if this paper will be used to explain the development of these scores to your grandmother. Explain everything like your reader knows nothing about the topic. Your conclusion should include some speculation about why the development you observe occured.

Your paper should be between 1000 and 1500 words (excluding references and r-code) and follow the following format: - 12 point, Times New Roman Font, for the main body text. - Double-space the main body of the text. - Use section and subsection headings, with larger or different font as you see fit. - 1 inch margins. - Include your name, the title of your paper, and the word count on the first page of your paper. - Beyond the points above, your paper should look and sound professional. You will be graded on completeness of the assignment, grammar, spelling, and creativity. Make sure to proofread before submitting! - In Final Submission: Paste the r-code used at the end of the assignment **(only in the final version, not in the first draft)**

SUBMISSION of first draft: **Prior to noon on Friday, October 5th** on eCampus under Writing Assignment 1 - First Draft. The final draft will be due on October 15th via turnitin on eCampus.