Homework #5

POSC 3410 - Quantitative Methods in Political Science

Steven V. Miller

This homework assignment will refer to the `1-wvs-usa-abortion.R` script I wrote and made available on the course's Github repository.[1] This is a sample from six waves of World Values Survey isolating just the responses in the United States. I offer a codebook for this data set on my Github, which I encourage the student to read.[2] Answer the following questions in two to three sentences each, unless otherwise noted.

1. Get a histogram of the dependent variable (`aj`). How would you describe the distribution of this variable? Would you treat this as an interval-level measurement? Why or why not?
2. Run Model 1 (`M1`). What is statistically associated with attitudes toward the justifiability of abortion and in what direction? Your answer should be five to seven complete sentences.
3. Look at the intercept for Model 1. What is the baseline? Why might this baseline be misleading?
4. Run Model 2 (`M2`). Notice the statistical significance of the coefficients didn't change but the interpretability of the coefficients did. What does the intercept communicate in Model 2 in substantive terms? What appears to have the largest effect (in magnitude) on the justifiability of abortion in the United States?
5. Run Model 3 (`M3`) and plot the interactive relationship of age on attitudes toward abortion. What do you see?

Extra Credit

6. Run Model 4 (`M4`) and plot the random effect. What do you think this communicates about the change in attitudes toward abortion over time?

---

[1] https://github.com/svmiller/posc3410/blob/master/homeworks/hw5/1-wvs-usa-abortion.R
[2] https://github.com/svmiller/wvs-usa-abortion-attitudes/blob/master/README.md