

# Homework 5

## SOCI 502B: Graduate Statistics (Fall 2017)

10 points

Due: December 13, 2017

### Overview:

In this assignment, you'll be completing 1 problem using SPSS (or R). This problem covers topics from Chapter 8 in your textbook.

### Problem 1 (*Regression*)

- Using the GSS 2014 data set (`GSS2014_final`)<sup>1</sup>, conduct a simple linear OLS regression analysis of how “political (conservative) views” (`polviews`) influence people’s belief that the it is an important right for citizens to engage in civil disobedience when they oppose government actions (`oppsegov`)<sup>2</sup>. Hint: think about what is the independent variable and what is the dependent variable.
  - `polviews` and `oppsegov` should be changed to scale measures
- Next, conduct a multiple OLS regression by including the (`race`) variable as another predictor of people’s belief that the it is an important right for citizens to engage in civil disobedience when they oppose government actions (`oppsegov`).
- In this full (multiple regression) model, what is the value of the  $R^2$  coefficient? How does it change from the initial (simple) model?
- In this full (multiple regression) model, what is the value of the  $F$  coefficient? How does it change from the initial (simple) model?
- Correctly and fully report and interpret the full model statistics. Include variance explained ( $R^2$ , with interpretation), model fit ( $F$ , with interpretation), and the values/significance of each independent variable.

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<sup>1</sup>For SPSS, use `GSS2014_final.sav`. For R, use the R script and `GSS2014_final.csv`

<sup>2</sup>Higher scores indicate that people believe civil disobedience against the government is a very important right (e.g. must be protected)