

Homework 3

SOCI 303: Statistics for the Social Sciences (Spring 2017)

10 points

Due: May 5, 2017

Overview:

In this assignment, you'll be completing 1 problem using R. This problem covers topics from Chapter 11 in your textbook. **Remember to append/copy and paste your R script as the final page of this assignment** (as a new page).

Problem 1 (*Chi-Square Test of Independence*)

- Using the **surveys** data set in R (from the MASS package), report a bivariate table for the relationship between the sex variable (**Sex**) and the smoking variable (**Smoke**).
- Given the number of rows and columns in your table, report the degrees of freedom for the bivariate relationship between the sex variable (**Sex**) and the smoking variable (**Smoke**).
- What is the value of the Chi-Square statistic?
- Correctly and fully report and interpret the Chi-Square statistic (using the example from our lecture slides, including the X^2 value, the degrees of freedom, and the p-value)