

SOC282 Lab Assignment 6: Due Mar 31st & Apr 1st

- I. Use the following table about the association between gender and fear of walking at night in your neighborhood to answer the questions below.

Afraid to walk at night	Men	Women	Total
Yes	94	242	336
No	343	295	638
Total	437	537	974

- a. Fill in the table below with the expected frequencies. (1 point)

Afraid to walk at night	Men	Women	Total
Yes			336
No			638
Total	437	537	974

- b. Calculate the obtained chi-squared statistic using the table below. (3 point)

	f_o	f_e	$f_o - f_e$	$(f_o - f_e)^2$	$(f_o - f_e)^2 / f_e$
Men & afraid					
Men & unafraid					
Women & afraid					
Women & unafraid					
Total					

Obtained chi-squared statistic: _____

- c. At an alpha level of 0.05, is the obtained chi-squared significant? Hint: Use the table in Appendix D on page 486. (1 point)
- d. What does this tell us about the relationship between fear of walking at night and gender? (1 point)

- II. Use GSS 2012 on SPSS to examine the relationship between health ("HEALTH") and social class ("CLASS"). Treat social class as the independent variable. Please attach your SPSS output of the tables and test results to your assignment.
- a. Run a chi-square test on SPSS of the association between health and social class. Interpret the obtained chi-square statistic. Discuss the significance of this finding at an alpha 0.05. *(2.5 points)*

 - b. Now elaborate the relationship by controlling for race ("RACE").
 - i. Using the obtained chi-squared statistic for the WHITE subsample, is the difference significant between classes for the WHITE category. *(1 point)*

 - ii. Using the obtained chi-squared statistic for the BLACK subsample, is the difference significant between classes for the BLACK category. *(1 point)*

 - iii. Using the obtained chi-squared statistic for the OTHER subsample, is the difference significant between classes for the OTHER category. *(1 point)*

 - iv. How does controlling for race change the analysis? What does this tell you about "race" as a control variable? *(1 points)*