**Independent Practice**

Instructions: Submit this lab report to BlackBoard by 5PM on November 21. You should upload two files: one MS Word file with answers, and a Stata .do with replication code. In particular, questions must be properly numbered, and include graphs or tables as appropriate. Don't forget to include identifying information (Name, PUID, Section). The total possible point for this report is 10.

**Q1. A political commentator argues that people who think that Muslim immigrants are critical threats to American security are more likely to support Trump. [Use "fttrump" "terror\_worry" "ftmuslim"]**

**(1) What is the dependent variable? Does higher value in the variable indicate greater support in Trump? (1pt)**

**(2) What are the independent variables? Does higher value in each variable indicate negative evaluation about Muslim immigrants? (1pt)**

**(3) Provide the correlation matrix of all three variables and fill in the blanks. (1pt)**

Pearson correlation coefficient between "fttrump" and "terror\_worry" is [ ], which is statistically [significant / insignificant]. According to the correlation coefficient, people who worried more that the United States will experience a terrorist attack in the near future are [more / less] likely to support Trump.

Pearson correlation coefficient between "fttrump" and "ftmuslim" is [ ], which is statistically [significant / insignificant]. According to the correlation coefficient, people who have good feelings about Muslims are [more / less] likely to support Trump.

Pearson correlation coefficient between "ftmuslim" and "terror\_worry" is [ ], which is statistically [significant / insignificant]. According to the correlation coefficient, people who have good feelings about Muslims tend to [more / less] worried that the United States will experience a terrorist attack in the near future.

**(4) Run a simple linear regression for for each IV with the DV separately and fill in the blanks. (1pt)**

The regression coefficient for "terror\_worry" is [ ] which is statistically [significant / insignificant] as the p-value is [greater / smaller] than 0.05. Thus we [could / fail to] reject the [null hypothesis / alternative hypothesis] at the 95% confidence level. This result shows that the relationship between "fttrump". "terror\_worry" is [positive / negative]. In plain English it means that the more [ ], the more [ ]. R-square is [ ] which indicates that [ ]% of total variations are explained by this model.

The regression coefficient for "ftmuslim" is [ ] which is statistically [significant / insignificant] as the p-value is [greater / smaller] than 0.05. Thus we [could / fail to] reject the [null hypothesis / alternative hypothesis] at the 95% confidence level. This result shows that the relationship between "fttrump". "ftmuslim" is [positive / negative]. In plain English it means that the more [ ], the more [ ]. R-square is [ ] which indicates that [ ]% of total variations are explained by this model.

**(5) Run a multiple linear regression for all two IVs. Compare the beta estimates from the simple regress to the beta estimates of the multiple regression. Are they different? Explain why. If not, why?** **(2pt)**

**(6) Mr.Davis argues that women are less supportive to Trump than men. Add the variable “gender” to the previous model. Was Mr.Davis right? Why?** **(2pt)**

**(7) Visualize the effect of "terror\_worry" on "ftttump" across gender by using the estimated predicted value of “fttrump”. Is there a difference between line slope of males and that of females? Which gender shows more support on Trump? Are the two lines statistically differentiable? If not, in which values of "terror\_worry", they are significantly differentiable?** **(2pt)**

[line for male: color: navy, line pattern: solid, line width: medium, CI line color: ltblue, pattern: dash, width: vthin]

[line for female: color: red, line pattern: solid, line width: medium, CI line color: pink, pattern: dash, width: vthin]

[ytitle: "Pro-Trump 2016"]

[xtitle: "Worry --------------------------------Terror--------------------------------- Not at all"]

[title: "Worries on Terror and Pro-Trump 2016"]

[graphregion: white]

[legend: subtitle: "Gender", row: 2, label: "Male" and "Female" for each fitted line]