

Homework 3:

Quantitative Research Methods

GLM Replication, Extension, and Plotting

Due before class Monday, April 11, 2022

The purpose of this homework is to replicate a GLM with an interaction term, plot results, and experiment with different links and GLM extensions. Specifically, you need to replicate Figure 2 in BITs.pdf. The R code is in UI_manuscript.R, and the data is in the data folder. The script is very clear and will easily replicate Figure 2.

Once you have done that, repeat the analysis with at least two other links, one of which should be an “extension” of GLMs. For example, it is currently a logit, and you can choose to run a Probit and a zero-inflated logit. Plot the marginal effects as in Figure 2.

Include in your submission your R code, and one pdf with the (pretty) plots. Include one paragraph about whether or not you found anything different than the findings in the manuscript, and speculate as to why.