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Course: Experimental Methods in Social Sciences—INWS0059.
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Programming Take-Home Exercise

Instructions

1. Download last version of this assignment here.
2. Download the toy conjoint dataset in any of the following formats: `RData`, `csv` or `dta`.
3. Familiarize yourself with the `cj` function in the `cregg` **R** package. Start here.
4. Following Hainmueller, Hopkins, and Yamamoto (2014), compute the *Average Marginal Component Effect* (AMCE) estimator. Consider the following as the outcome variable: `ChoiceMade`. On the right-hand-side, consider the following variables: `Policy`, `Experience`, `Party_Affiliation`). Write 100 words on what can be learned. Use graphical methods to support your answer. Hint: `estimate = "amce"`.
5. Following Leeper, Hobolt, and Tilley (2020), and considering the same variables as above, compute the *Marginal Means* (MM) estimator. Write 100 words on what can be learned. Use graphical methods to support your answer. Hint: `estimate = "mm"`.
6. Discuss the strengths and weaknesses of each estimator in up to 200 words.

Expected Outputs

1. One **R** script with your code. The code must run in one try and include all necessary packages and libraries. If the code does not run, the assignment will not be graded.
2. One written report with your text responses in PDF format.

☞ This exercise may be completed in groups; however, individual assignment submissions are required.

References

Hainmueller, Jens, Daniel Hopkins, and Teppei Yamamoto (2014). "Causal Inference in Conjoint Analysis: Understanding Multidimensional Choices via Stated Preference Experiments." In: *Political Analysis* 22.1, pp. 1–30.

Leeper, Thomas, Sara Hobolt, and James Tilley (2020). "Measuring Subgroup Preferences in Conjoint Experiments." In: *Political Analysis* 28.2, pp. 207–221.