

ICPSRCDA17 CDA: Binary Regression Model: Part 2

Your Name: _____

Points received: _____ out of 80

In what follows, I refer to the dependent variable as Y, the binary variable you interpret as B, the continuous variable you interpret as C, and all other variables in your model as X.

1. ___ of 5: Using the cleaned data you created and saved in BRM P1, re-estimate the **logit** model of Y on B, C, and X from question 3 of BRM Pt1. Your results must match.
2. ___ of 10: Compute the predicted probabilities for all cases using the `predict` command and include a *dotplot* of these probabilities (ensure your y-axis runs from 0 to 1). What substantive insights do you gain from this graph?
3. ___ of 10: Compute the discrete change coefficients for C and B using `mchange`. Hold other variables at values you find interesting or useful.
4. ___ of 10: Choose an appropriate discrete change coefficient for B from your `mchange` output and report the associated 95% confidence interval. Make sure the results match your output in 3 above. Interpret this discrete change coefficient, including the confidence interval.
5. ___ of 10: Compute the discrete change coefficient and 95% confidence interval for C changing from .5 standard deviations below the mean to .5 standard deviations above the mean using `mchange`. Make sure the results match your output in 3 above. Interpret this discrete change coefficient, including the confidence interval.
6. ___ of 15: Use `mgen` and the `graph` commands to generate and plot predicted probabilities over the range of variable C for both values of B. Hold the other variables at the same location you chose in question 3 above. Present the plot. Write a paragraph telling the **story** of your results. This should read as though it were part of a journal article. Incorporate the magnitude of the effects and the associated confidence intervals as needed (Hint: Use `mchange` to calculate these). Also be sure to indicate the levels of any other variables in your model.
7. ___ of 10: Looking back on your work from BRM P1 & P2, which method(s) of interpretation did you find most useful (factor change, discrete change, plotting, some combination)? Why?
8. ___ of 10: My assessment of the overall effectiveness of your answers.