

POL 222: Introduction to Quantitative Reasoning I

Tutorial 2

Essay 1

Complete the exercise below as much as possible before the tutorial session for Essay 1. You will have an opportunity to receive a critical feedback to your essay ideas from your peers in the tutorial session.

For your ideas on Essay 1, answer the following questions.

1. Research Question

(1) What is your research question?

(2) What is the substantive significance of the research question?

2. Causal Theory and Hypothesis

(1) What is the dependent variable?

(2) What is the independent variable?

(3) State the causal theory and formulate a testable hypothesis based on this theory.¹

(4) What would be a reasonable causal mechanism linking the independent and dependent variables?

¹When you identify a causal theory, dependent and independent variables should be stated in *general abstract concepts*. When you formulate a hypothesis based on the theory, they should be stated in something *observable*.

3. Is there any possibility of reverse causality? If so, what would be the causal mechanism?

4. What would be the other causes of the dependent variable identified in 2-(1)?

5. Of those other causes identified in 4 above, which one would potentially be the confounding variables? Why?

6. What effect would you expect of the potential confounding variables identified in 5 above on the relationship between the independent and dependent variables identified in 2-(1) and 2-(2)? Use the omitted variable bias formula to identify the direction of bias.