

Title: Reading and Understanding Political Science  
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Terms to Know:

- Theoretical article
- Applied theory
- Formal modeling
- Assumptions
- Independent/Explanatory Variable
- Dependent/Outcome Variable
- Causal Inference
- Hypothesis
- Theory
- Case Study
- Qualitative data
- Quantitative data
- Small-n vs. Large-n
- Statistical significance
- Literature review
- Book review
- JSTOR
- Normative
- Research design
- Causal mechanism
- Dyadic
- Operationalizing
- Coding
- Bias
- Case selection
- Regression
- Coefficients/Beta values
- Unit of analysis
- Observation
- Positive/direct relationship
- Negative/inverse relationship
- Control variable
- Dummy variable
- Theorem
- Lemma
- Equilibrium

Questions to Think About From the Reading:

1. Why do you think the type of empirical approach used varies across the subfields of political science?
2. Why is the explanation of how a variable was measured so important? Why do you think measurement problems are often particularly tricky for political scientists?
3. If a variable is statistically significant, does this guarantee its “importance”?
4. Why is case selection critically important to a study?

5. What is the difference between statistical significance and substantive significance?
6. If a variable's coefficient is statistically significant, what does this tell us about the variable's relationship with the dependent variable?

Questions to Think About For Class:

1. Let's say a researcher was trying to predict (i.e., use as their dependent variable) someone's IQ score. One of the major explanatory variables in the study is a person's shoe size. The researcher performs a regression analysis and finds a positive and statistically significant relationship between shoe size and IQ. That is, as shoe size goes up, so does a person's IQ. The researcher is very excited about this finding. Why might her excitement be premature?

2. Let's say you are interested in conducting an exit poll during the November election. You go to your hometown and sit outside the local polling station with a sign saying "Exit Poll! Come tell me how you voted!" At the end of the day, you have collected information from 78 people. Although this is a pretty good sample size, why might you not have a lot of confidence in your findings?

3. You are interested in studying the effect of election monitoring in emerging democracies. To see if election monitoring leads to less corruption elections, you visit three countries that have used UN election monitors and find that there is little evidence of corruption (i.e., no signs of bribes or coercion by political parties to gain votes). You conclude that election monitoring does indeed prevent corruption. Why might your colleagues back at the university be unwilling to accept your results?

4. You are interested in buying a new computer, so you head to the company's website and browse the user forums. 85% of the messages are about problems users have been having with the computer. What should this tell you about whether this computer is a good buy?

5. The police commissioner of a major US city suspects one of his new district commanders is too soft on crime. To test this suspicion, he begins a new program where every criminal incident in the district is counted by a computer, instead of being submitted in writing by individual police officers and tallied by the night watchman. After a week of collecting data, the commissioner compares the number of criminal incidents to the number of incidents recorded in the same month of the previous year (before the new district commander took office.) He finds that the number of criminal incidents has nearly tripled! He goes to the mayor and demands the district commander be fired. Why might the mayor be hesitant to follow through on the commissioner's request?

6. How would you propose to measure quantitatively (i.e., produce a measure that can be coded using numbers) the following concepts? Pretend you have unlimited monetary resources.

- Cronyism in state government
- A person's popularity
- Animosity between countries
- International confidence in a country's currency
- The salience of a political scandal
- A politician's responsibility for a certain policy
- The severity of a genocide