

Pols 200: Methods of Political Science

Formulating Hypotheses

What is a hypothesis?

- An explicit statement that indicates how a researcher thinks the phenomena of interest are related
- Hypotheses are educated guesses or propositions about relationships under investigation.

Types of hypotheses

- 1) Null hypothesis
 - Hypothesis stating that there is no relationship between 2 concepts
- 2) Correlative hypothesis
 - States that there is a relationship between 2 or more concepts/variables, but doesn't specify nature of relationship
 - Correlation/Association
- 3) Directional hypothesis
 - States the nature of the relationship between concepts
 - Some types of relations include: positive, negative (inverse), curvilinear, or logarithmic
- 4) Causal hypothesis
 - State that one variable causes the other

Characteristics of Good Hypotheses

- 1) Empirical Statements
 - Propositions about relationships that exist in the real world
 - Not statements about they way things ought to be
- 2) Plausible
 - There should be some logical reason for thinking the hypothesis might be true
- 3) Specific
 - Relationship should be stated as specifically as possible
 - Concepts used in hypothesis should be carefully defined
- 4) Consistent with Data
 - Hypothesis should be stated in a manner that corresponds to the way it will be tested
 - It should also reflect whether you would test the relationship at point in time or over time.
 - Units of analysis should be clear
- 5) Testable
 - There must be some evidence that we can obtain and that will indicate whether hypothesis is correct.
 - A hypothesis could also be untestable because of the way it is stated or the way concepts are defined.