

University of Oxford

Research Methods in Politics: Lecture One

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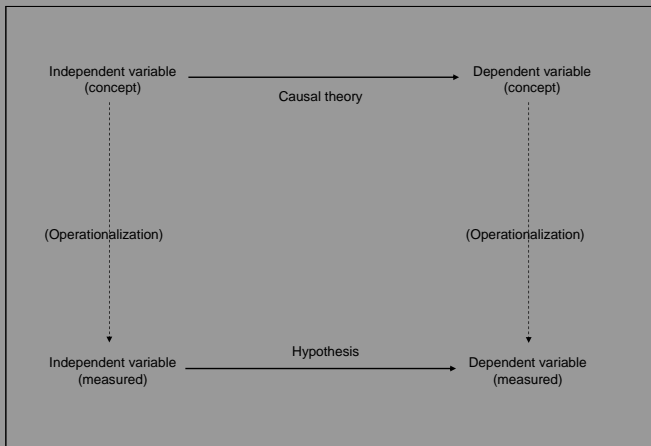
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- ▶ A **hypothesis** is a theory-based statement about a relationship that we expect to observe.

The relationship between a theory and a hypothesis



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- ▶ Pursue both generality and parsimony

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- ▶ The role of deductive reasoning (or “formal theory”)

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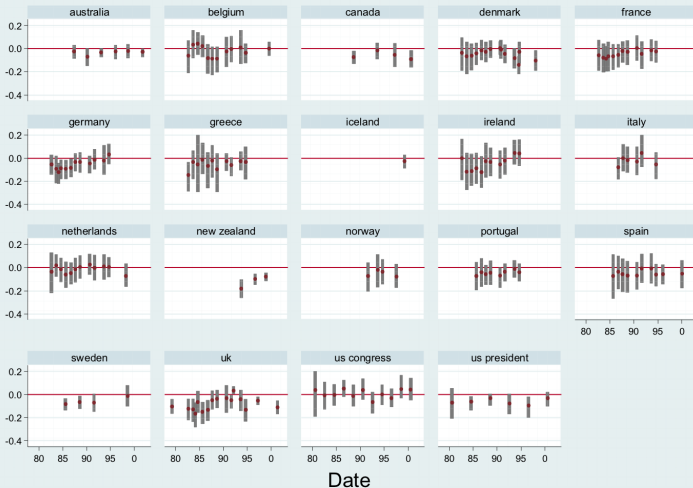
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- ▶ Example from my research – the Economic Vote

Identifying interesting variation in a dependent variable

Figure 3.2. Chief Executive Party Economic Vote by Country



Note: One Greek upper confidence interval is truncated

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 - ▶ Calorie consumption

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- ▶ The bathroom scale

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- ▶ Construct validity

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- ▶ Robert Dahl: “contestation” and “participation.”
- ▶ The best-known is the Polity IV measure: annual scores ranging from -10 (strongly autocratic) to +10 (strongly democratic) for every country on earth from 1800 - 2004.

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 - ▶ Constraints on chief executive

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- ▶ Countries that have regular elections between groups that are more than ethnic rivals will have higher scores.

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- ▶ Bear in mind that establishing causal relationships between variables is not at all akin to hunting for DNA evidence like some episode from a television crime drama.
- ▶ Social reality does not lend itself to such simple, cut-and-dried answers.
- ▶ Is there a “best practice” for trying to establish whether X causes Y ?

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- ▶ Is there some **confounding variable** Z that is related to both X and Y , and makes the observed association between X and Y **spurious**?

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- ▶ Since the main goal of science is to establish whether causal connections between variables exist, then failing to control for other causes of Y is a potentially serious problem.
- ▶ Statistical analysis should not be disconnected from issues of theory (model) and research design.

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- ▶ Lets explore three generic strategies

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- ▶ measure the dependent variable (Y) again
- ▶ if between measurements the group that was exposed (called the test group) has changed relative to the control group, ascribe this to the effect of the independent variable (X) on the dependent variable (Y)

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Table: Some Research Designs

Type	Graphic Representation
Observation with no control group	Test group: M * M
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True experiment	Test group: R M * M Control: RM M