

Causality

February 8, 2022

POLS 095

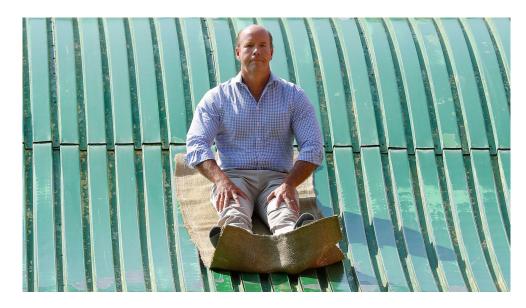
Drake University

ASKING WHY? (OR HOW?)

Proposing and testing explanations for political phenomena

Examples?





We will never know why John Delaney ran for president

EXPLANATIONS

Key characteristics of questions

Explanations and creativity

Testable?

Role of hypotheses

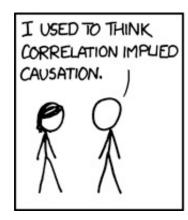


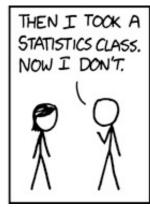
TYPES OF VARIABLES USED FOR EXPLANATION

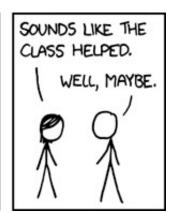
The **dependent** (response) variable (Y)

The **independent** (**explanatory**) variable (X)

 $X \rightarrow A\dot{s}$



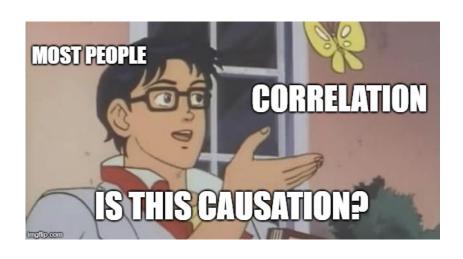




WHAT MAKES A GOOD EXPLANATION?

Q: Why are Cuban-Americans so much more likely to vote for Republican candidates than Mexican-Americans, Puerto Ricans and other Latinos?





Four rules of thumb

- 1. Plausible mechanism
- •2. Rule out $Y \rightarrow X$
- •3. Do X and Y covary in an identifiable way?
- 4. Rule out other causes

1. Is there a plausible mechanism connecting them? Does any explanation make sense?

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2. Can we rule out the possibility that $Y \rightarrow X$?

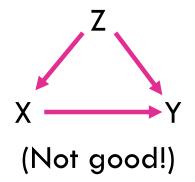
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FOUR HURDLES TO INFERRING CAUSALITY (X > Y?)

3. Do X and Y covary in an identifiable way?

9

4. Can we eliminate any Z_s related to X and Y that might cause Y?



If two variables, X and Y move together, i.e., are associated, correlated, interdependent, what possible reasons could there be for this relationship?





Others?

THE PATH TO EVALUATING A CAUSAL RELATIONSHIP

