Checklist for a compelling research design

A specific research question (not simply a topic). This question defines your dependent variable -- i.e., the thing you're trying to explain.

Measurements of your dependent variable:
- dichotomous (i.e., yes/no)
- continuous (e.g., 1-27)
- categorical (e.g., blue-green-red)

A set of arguments or explanations for why the dependent variable takes on one value or another. These are your hypotheses, and they define your independent variables.

Measurements of your independent variables.

Data that will allow you to test which hypotheses are right or wrong.
- If you have N-1 hypotheses, you must have at least N cases.
- Do not “select on the dependent variable”
- Defend explicitly

A set of appropriate methods for testing your arguments.

Criteria for deciding when an argument is right or wrong.

Maximize the observable implications of your central argument