

Exercise: Identifying Natural Experiments

In groups of 3, consider the broad research question and specific research setting below and then answer the following questions:

Broad Research Question: *How do national celebrations affect political behaviour?*

Specific Research Setting: *We want to estimate the effect of 4th of July Independence Day parades on Americans' voting behaviour (whether they vote, and who they vote for). Throughout their school years, American children generally participate in annual parades through their local streets.*

1. What is the treatment assignment mechanism in this specific research setting?
2. Who controls treatment assignment?
3. Identify a component of the treatment assignment mechanism that is independent of potential outcomes. Is this component random or 'as-if' random?
4. What *quantitative* evidence could we use to assess whether this component of treatment assignment is truly independent of potential outcomes?
5. What *qualitative* evidence could we use to assess whether this component of treatment assignment is truly independent of potential outcomes?
6. If we used this component of treatment assignment as a natural experiment, how would the treatment and control groups be defined?
 - (a) Is this the treatment we are really interested in to understand our broad research question?
 - (b) Is this the comparison we really want to make to understand our broad research question?
7. In your proposed natural experiment, what data sources could we use to measure treatment and the outcome?
8. In your proposed natural experiment, what are the sample and the population? Is this an 'interesting' and relevant population for understanding our broad research question?
9. How would you propose to analyze the data from your natural experiment? (What regression would you run?)
10. How generalizable are the results of your proposed analysis?