IPSA Multi-Methods: Lab 1

Due on First Day

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Problem 1

Introduction to R

Since we will be using R for the quantitative and statistical components in this course, it is useful to explore the system. Please complete the following tutorial labs to start familiarizing yourself with how the system works.

`https://openintrostat.github.io/oilabs-tidy/01_intro_to_r/intro_to_r.html`

`https://openintrostat.github.io/oilabs-tidy/02_intro_to_data/intro_to_data.html`

Problem 2

Multi-Method Elements in Snow on Cholera

In 1855, the English epidemiologist, John Snow, published a book correctly identifying the mode of transmission of cholera. This book has subsequently become a paradigmatic case of successful causal inference for social science methodologists. The book is available online here:

`https://www.ph.ucla.edu/epi/snow/snowbook.html`

Please examine the study, identifying quantitative and qualitative components of the causal inference. (Note that statistics was not fully developed at the time, and so quantitative components may lack some features that we expect in contemporary research.) Focus primarily on Part 3 of the book.

Explain what each component contributes to the causal inference. Does Snow's multi-method research make the causal inference more powerful than it would be as a purely quantitative study? If so, explain why.

Problem 3

From Triangulation to Integration

Find a small group of students to work with. Together, select a published article in an area that interests you that uses a triangulation multi-method design. What would have to change to turn this design into an integrative design? Be as specific as possible about how to rework the study using integrative multi-method design. In what ways would your proposed integrative version of the article be better than the original version? In what ways might it be weaker?