Mixed-methods Designs
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9:00am – 4:30pm

Summary
This workshop will develop introductory and more advanced themes in multi-method research design. Students will compare the two major paradigms of multi-method research design: triangulation and integration. The course will then cover a series of practical research-design considerations involved in integrative multi-method research, including case selection, testing assumptions, and revising causal inferences in light of findings. We will look at designs that combine qualitative process tracing with regression-type observational studies, natural experiments, and randomized experiments.

Outline
Reflecting the rising popularity of research that combines qualitative and quantitative social science, this workshop systematically analyzes the task of designing multi-method research. We will argue that methods can be productively combined using the framework of integrative multi-method research, with one method used to carry out a final causal inference, and methods from other traditions to test the key assumptions involved in that causal inference. The workshop will consider a wide range of statistical tools, including regression, matching, natural experiments, and experiments. It will also discuss qualitative tools including process tracing, the use of causal-process observations, and comparative case-study research.

Combining regression and case studies for the purpose of improving causal inference has long been the central focus of research on multi-method design. The course begins by carefully analyzing this topic, developing appropriate qualitative and quantitative design components as well as case selection strategies to facilitate improved causal inference.

Schedule of Sessions and Reading List*

Day 1: Regression, Case Studies, and Causal Inference
There are two competing paradigms of multi-method research: triangulation and integration. Triangulation involves separate qualitative and quantitative research designs that ask and answer the same overarching question. Integration involves using one method to form a final causal inference and tools from the other methodological family to test or justify assumptions supporting that causal inference.

- Seawright, Jason, Multi-Method Social Science: Combining Qualitative and Quantitative Tools (Cambridge University Press 2016), Chapter 1.

*It is encouraged that students purchase this book in preparation for this workshop.
Multi-method research design is built around the idea that combining qualitative and quantitative research activities can produce stronger causal inferences than either mode of research can produce alone. To develop this idea for designs that combine regression and case studies, we need a clear idea of exactly what each kind of method actually contributes to causal inference.

Recommended:
Several of the critical assumptions for regression-based causal inference can be at least partially tested with qualitative design components. We will discuss tests for confounding, for measurement problems, and for the existence of theoretically crucial causal pathways.

**Day 2: Multimethod Case Selection, Matching, and Natural Experiments**

A key hurdle in multi-method research is figuring out how to make sure that the qualitative and quantitative design components are strongly interrelated. Statistically informed case selection can help establish this connection, and the right choices about case selection can increase the chances of causally relevant discoveries within the qualitative analysis.

Recommended:

**References**

- Seawright, Multi-Method Social Science, Chapter 2.
While the regression-type causal inferences discussed in the first module remain widespread in the social sciences, more advanced tools for causal inference and for theory-building are increasingly mainstream. The popularity of natural experiments in the social sciences has grown alongside that of multi-method designs. While natural experiments are attractive because they rely on different assumptions than regression-type inferences, they still require strong assumptions. We will explore qualitative design components for testing the key assumptions in classic natural experiments, instrumental-variables natural experiments, and regression discontinuity designs.

- Seawright, Multi-Method Social Science, Chapter 6.

Webster Course Reserve Room (3 hour loan) - Available

Recommended:


Matching methods rely on the same control variables strategy as regression, but make slightly different assumptions and allow for different multi-method designs. We will discuss these methods and the best ways of including qualitative evidence.

- Seawright, Multi-Method Social Science, Chapter 5.

**Day 3: Multimethod Experiments, Multimethod Case Studies, and Complexity**

True randomized experiments require the fewest and simplest assumptions of any quantitative tool for causal inference, but they still make important assumptions. We will discuss case study designs to test SUTVA and experimental realism. We will also discuss designs using experiments or other quantitative tools as steps in a process-tracing argument.

- Seawright, Multi-Method Social Science, Chapters 7-8.

Recommended:


Multi-method designs can readily be built in which the final causal inference is based on case studies and case comparisons, and in which quantitative methods serve an auxiliary or assumption-testing purpose. We will explore methods for quantifying uncertainty in case-study contexts, for using quantitative design components as part of process tracing, and for setting up comparative analysis using quantitative causal inferences as the outcome to be explained.

- Seawright, Multi-Method Social Science, Chapter 8.
To date, most work on multi-method research has emphasized relatively simple causal questions about average treatment effects. Yet more complex causal models are common in the social sciences. We will explore multi-method strategies for discovering and testing complex theories (with multiple outcomes, interactivity, and/or nonlinearity).


Recommended:


*If you are registered for credit, you can find these readings on course reserve: [http://reserves.concordia.ca/](http://reserves.concordia.ca/)

*If you are registered for non-credit and are unable to locate the readings, please contact us at wssr@concordia.ca