

PP6708 Research Designs in Public Policy
Lee Kuan Yew School of Public Policy (AY 2019/20 Sem 1)

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Class Hours: Monday, 2:00–5:00
Venue: EE/SCU Meeting Room, OTH Wing B Level 3
Consultation Hours: by appointment

Module Description

This module is required for all first-year PhD students in Public Policy. This is the first of the three-module series on research methods for PhD students in Public Policy. The purposes of the module are to introduce to students key concepts in research methods, and to help them to develop skills in the design of empirical research used in the analysis of policy problems. The aim is that students are able to apply various research designs in conducting rigorous policy research in their chosen fields, as well as develop the ability to critically evaluate the validity of policy research products. A specific emphasis will be on the use of experimental and quasi-experimental designs in policy research, as well as on their potentials and limitations.

Upon completion of the module, students would be expected to prepare (or improve) their PhD research proposal. Additionally, the students are expected to 1) understand the logic of policy research on causal relationship; 2) have a working knowledge on key research designs for generalized causal inference, with a good understanding of their potentials, limitations and core principles; 3) be able to summarise and critique research papers; and 4) put together a research proposal on a given research topic in their chosen fields.

Required Textbooks

Trochim, W., Donnelly, J. P. and Arora, K. (2015). *Research methods: The essential knowledge base*. Nelson Education. Chicago.

Shadish, W. R., Cook, T. D. and D. T. Campbell. (2002). *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*. Belmont, CA: Wadsworth.

Assessment and Grading Criteria

Details for each assignment will be provided in class:

Components	Weights
Paper analysis (2)	40%
Class presentations	10%
Discussions	10%
Research proposal	40%

Course Outline and Readings

Please note that this outline may be subject to change to adapt to students' needs along the way.

Week 1 (16* August, 2019): Introduction to Research Design

[*Make-up class for public holiday on 12 August, 2019]

Foundation Readings

Chapters 1 Trochim, W., Donnelly, J. P. and Arora, K. (2015). Research methods: The essential knowledge base. Nelson Education. Chicago.

Papers for in-class discussion

Akter, S. & Chindarkar, N. (2019). The link between mothers' vulnerability to intimate partner violence and Children's human capital. *Social Science Research*, 78, 187–202.

Week 2 (19 August, 2019): Sampling and Measurement

Foundation Readings

Chapters 4, 5 & 6 Trochim, W., Donnelly, J. P. and Arora, K. (2015). Research methods: The essential knowledge base. Nelson Education. Chicago.

Papers for in-class discussion

Akter, S., & Chindarkar, N. (2019). The link between mothers' vulnerability to intimate partner violence and Children's human capital. *Social Science Research*, 78, 187–202.

Zombré, D., De Allegri, M., & Ridde, V. (2017). Immediate and sustained effects of user fee exemption on healthcare utilization among children under five in Burkina Faso: A controlled interrupted time-series analysis. *Social Science & Medicine*, 179, 27–35.

Week 3 (26 August, 2019): Statistical and Internal Validity of Policy Research

Foundation Readings

Chapter 2 Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). Experimental and quasi-experimental designs for generalized causal inference: Wadsworth Cengage learning.

Papers for in-class discussion

Akter, S., & Chindarkar, N. (2019). The link between mothers' vulnerability to intimate partner violence and children's human capital. *Social Science Research*, 78, 187–202.

Zombré, D., De Allegri, M., & Ridde, V. (2017). Immediate and sustained effects of user fee exemption on healthcare utilization among children under five in Burkina Faso: A controlled interrupted time-series analysis. *Social Science & Medicine*, 179, 27-35.

Week 4 (2 September 2019): Construct and External Validity of Policy Research

Foundation Readings

Chapter 3 Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). Experimental and quasi-experimental designs for generalized causal inference: Wadsworth Cengage learning.

Papers for in-class discussion

Zombré, D., De Allegri, M., & Ridde, V. (2017). Immediate and sustained effects of user fee exemption on healthcare utilization among children under five in Burkina Faso: A controlled interrupted time-series analysis. *Social Science & Medicine*, 179, 27-35.

Akter, S. (2019). Impact of drinking water salinity on children's education: Empirical evidence from coastal Bangladesh. *Science of The Total Environment*.
<https://doi.org/10.1016/j.scitotenv.2019.06.458>

Week 5 (9 September, 2019): Quasi-Experimental Designs (Difference-in-Difference)

Foundation Readings

Chapters 4 and 5 Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). Experimental and quasi-experimental designs for generalized causal inference: Wadsworth Cengage learning.

Wing, C., Simon, K., & Bello-Gomez, R. A. (2018). Designing Difference in Difference Studies: Best Practices for Public Health Policy Research. *Annual Review of Public Health*, (0).

Papers for in-class discussion

Bauer, T. K., Braun, S. T., & Kvasnicka, M. (2017). Nuclear power plant closures and local housing values: Evidence from Fukushima and the German housing market. *Journal of Urban Economics*, 99, 94–106.

Week 6 (16 September, 2019): Quasi-Experimental Designs (Propensity Score Matching)

Foundation Readings

Austin, P. C. (2011). An introduction to propensity score methods for reducing the effects of confounding in observational studies. *Multivariate Behavioral Research*, 46(3), 399–424.

Papers for in-class discussion

Mendola, M. (2007). Agricultural technology adoption and poverty reduction: A propensity-score matching analysis for rural Bangladesh. *Food Policy*, 32(3), 372–393.

RECESS WEEK

Week 7 (30 September, 2019): Quasi-Experiments: Interrupted Time Series Designs

Assignment 1 due on October 3, 2019, 11:59pm

Presentation 1 Havnes, T., & Mogstad, M. (2011). No child left behind: Subsidized child care and children's long-run outcomes. *American Economic Journal: Economic Policy*, 3(2), 97–129.

Foundation Readings

Chapter 6 Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*: Wadsworth Cengage learning.

Week 8 (7 October, 2019): Regression Discontinuity Designs

Presentation 2 Park, E. S., & Sener, I. N. (2019). Traffic-related air emissions in Houston: Effects of light-rail transit. *Science of the Total Environment*, 651, 154–161.

Foundation Readings

Chapter 7 Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*: Wadsworth Cengage learning.

Papers for in-class discussion

Kanz, M. (2016). What does debt relief do for development? Evidence from India's bailout for rural households. *American Economic Journal: Applied Economics*, 8(4): 66–99.

Week 9 (14 October, 2019): Randomized Experiments

Presentation 3 Tuttle, C. (2019). Snapping back: Food stamp bans and criminal recidivism. *American Economic Journal: Economic Policy*, 11(2), 301–27.

Foundation Readings

Chapter 8 Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*: Wadsworth Cengage learning.

Duflo, E., Glennerster, R., and Kremer, M. (2007) Using randomization in development economics research: A toolkit. *Handbook of Development Economics*, 4, 3895-3962.

Papers for in-class discussion

Devoto, F., Duflo, E., Dupas, P., Parienté, W., & Pons, V. (2012). Happiness on tap: piped water adoption in urban Morocco. *American Economic Journal: Economic Policy*, 4(4), 68–99.

Week 10 (21 October, 2019): Practical Problems

Presentation 4 Hidrobo, M., Peterman, A., & Heise, L. (2016). The effect of cash, vouchers, and food transfers on intimate partner violence: Evidence from a randomized experiment in Northern Ecuador. *American Economic Journal: Applied Economics*, 8(3), 284–303.

Foundation Readings

Chapters 9 and 10 Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*: Wadsworth Cengage learning.

Angrist, J. D., Imbens, G. W., & Rubin, D. B. (1996). Identification of causal effects using instrumental variables. *Journal of the American Statistical Association*, 91(434), 444–455.

Papers for in-class discussion

Carter, M. R., Laajaj, R., & Yang, D. (2013). The impact of voucher coupons on the uptake of fertilizer and improved seeds: evidence from a randomized trial in Mozambique. *American Journal of Agricultural Economics*, 95(5), 1345–1351.

Week 11 (28 October, 2019): Public Holiday (No class)

Assignment 2 due on October 31, 2019, 11:59pm

Week 12 (4 November, 2019): Generalized Causal Inference

Presentation 5 Marx, B. M., & Turner, L. J. (2019). Student loan nudges: Experimental evidence on borrowing and educational attainment. *American Economic Journal: Economic Policy*, 11(2), 108–41.

Foundation Readings

Chapters 11, 12 and 13 Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*: Wadsworth Cengage learning.

Week 13 (11 November, 2019): Student Presentations

During this session, students will present their research proposals and obtain feedback from everyone.

NOTE - LKY SPP PLAGIARISM WARNING FOR CLASS ASSIGNMENTS

“The LKY School’s Academic Code of Conduct lists academic integrity as one of six important values. According to this Code, we have agreed to ‘make every effort to understand what counts as plagiarism and why this is wrong’. You will need to acknowledge conscientiously the sources of information, ideas, and arguments used in your paper. For this purpose, you will use the ‘footnote style’ according to the Chicago Manual of Style, the guidelines for which can be found online at http://www.dianahacker.com/resdoc/p04_c10_s2.html in the companion website for Diana Hacker’s *A Writer’s Reference*. Please also refer to the handout that was given to you at the Workshop on Plagiarism conducted during the Orientation period.”