

Introduction to Qualitative Comparative Analysis (QCA) **ICPSR Summer Program 2024**

QCA can be used to answer any substantively motivated research question if one is interested in analyzing patterns of necessity and sufficiency. There is neither a limit in the number of cases that one can process nor with regard to the nature of the data that can be micro data, macro data or a mix of data types. If you believe that the empirical phenomenon you want to explain in your research requires a set-relational perspective, potentially including a complex interplay of multiple conditions, and you want to use QCA, then this course is for you.

The course introduces participants to the logic and techniques of QCA on an applied level using *R/RStudio*. You will be introduced to the basic principles and requirements of sound QCA research and learn how to implement them using *R*. At the end of the course, participants will be familiar with the key elements of a QCA study. They will know how to read, criticize and implement an empirical QCA study. Basic knowledge of QCA, set-theoretic thinking and *R* is useful, but not necessary for taking the course.

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Information about ICPSR Summer Program + Registration:

<https://www.icpsr.umich.edu/web/pages/sumprog/courses/short-workshops.html>

Course schedule plus readings

For each topic, I will prepare R scripts that form the basis for the discussion and exercises in class. From one day to the next, course participants can work on small assignments to repeat lessons learned on that day. During each session, we will have one or two breaks of 30-40 minutes in total. All times in this plan are Eastern Standard Time (EST). All material will be shared online ahead of the workshop.

<p>Day 1 9.00am-11.00am</p>	<p><u>Basics of QCA and set-based research</u> Oana, Ioana-Elena, Carsten Q. Schneider, and Eva Thomann (2021): <i>Qualitative Comparative Analysis Using R: A Beginner's Guide</i>. Cambridge: Cambridge University Press: chapter 1. Mello, Patrick A. 2022. <i>Qualitative Comparative Analysis: An Introduction to Research Design and Application</i>. Washington DC: Georgetown University Press: Chapter 2.</p> <p><u>Getting started with RStudio: Good practices</u> Seibold, Heidi (2022): <i>6 Steps Towards Reproducible Research</i>. Typescript.</p>
<p>Day 1 11.15am-12.45pm / 1.00pm-2.00pm</p>	<p><u>Calibration and calibration strategies I</u> Set theory: Schneider, Carsten Q. and Claudius Wagemann (2012): <i>Set-theoretic methods for the social sciences. A guide to Qualitative Comparative Analysis</i>. Cambridge: Cambridge University Press: Chapter 3.</p>
<p>Day 2 9.00am-11.00am</p>	<p><u>Calibration and calibration strategies II</u> Set theory: Schneider, Carsten Q. and Claudius Wagemann (2012): <i>Set-theoretic methods for the social sciences. A guide to Qualitative Comparative Analysis</i>. Cambridge: Cambridge University Press: Chapter 3.</p>
<p>Day 2 11.15am-12.45pm / 1.00pm-2.00pm</p>	<p><u>Necessity: Analysis and interpretation I</u> Oana, Ioana-Elena, Carsten Q. Schneider, and Eva Thomann (2021): <i>Qualitative Comparative Analysis Using R: A Beginner's Guide</i>. Cambridge: Cambridge University Press: Sections 3.2, 3.3. Mello, Patrick A. 2022. <i>Qualitative Comparative Analysis: An Introduction to Research Design and Application</i>. Washington DC: Georgetown University Press: Chapter 6.</p>
<p>Day 3 9.00am-11.00am</p>	<p><u>Necessity: Analysis and interpretation II</u> Oana, Ioana-Elena, Carsten Q. Schneider, and Eva Thomann (2021): <i>Qualitative Comparative Analysis Using R: A Beginner's Guide</i>. Cambridge: Cambridge University Press: Sections 3.2, 3.3.</p> <p><u>Truth table preparation I</u> Oana, Ioana-Elena, Carsten Q. Schneider, and Eva Thomann (2021):</p>

	<i>Qualitative Comparative Analysis Using R: A Beginner's Guide</i> . Cambridge: Cambridge University Press: Sections 4.3.1.
Day 3 11.15am-12.45pm / 1.00pm-2.00pm	<u>Truth table preparation II</u> Set theory: Schneider, Carsten Q. and Claudius Wagemann (2012): <i>Set-theoretic methods for the social sciences. A guide to Qualitative Comparative Analysis</i> . Cambridge: Cambridge University Press: Chapter 5.
Day 4 9.00am-11.00am	<u>Minimization of a truth table I</u> Oana, Ioana-Elena, Carsten Q. Schneider, and Eva Thomann (2021): <i>Qualitative Comparative Analysis Using R: A Beginner's Guide</i> . Cambridge: Cambridge University Press: Section 4.4 Baumgartner, Michael and Alrik Thiem (2017): Model ambiguities in configurational comparative research. <i>Sociological Methods & Research</i> 46 (4): 954-987.
Day 4 11.15am-12.45pm / 1.00pm-2.00pm	<u>Minimization of a truth table II</u> Schneider, Carsten Q. and Claudius Wagemann (2012): <i>Set-theoretic methods for the social sciences. A guide to Qualitative Comparative Analysis</i> . Cambridge: Cambridge University Press: Chapters 8-9.
Day 5 9.00am-11.00am	<u>Interpretation and presentation of results</u> Ragin, Charles C. (2006): Set relations in social research: Evaluating their consistency and coverage. <i>Political Analysis</i> 14 (3): 291-310. Oana, Ioana-Elena, Carsten Q. Schneider, and Eva Thomann (2021): <i>Qualitative Comparative Analysis Using R: A Beginner's Guide</i> . Cambridge: Cambridge University Press: 116-119.
Day 5 11.15am-12.45pm / 1.00pm-2.00pm	<u>Robustness assessments</u> Oana, Ioana-Elena, Carsten Q. Schneider, and Eva Thomann (2021): <i>Qualitative Comparative Analysis Using R: A Beginner's Guide</i> . Cambridge: Cambridge University Press: Section 5.2. <u>Summary: Methodological and computational good practices</u> No reading.

Participants who want to get a better idea about the basics of set theory, QCA and its implementation using *RStudio* may consult the following readings.

- History and development of QCA: Marx, Axel, Benoît Rihoux and Charles Ragin (2014): The origins, development, and application of Qualitative Comparative Analysis: The first 25 years. *European Political Science Review* 6 (1): 115-142. <https://doi.org/10.1017/S1755773912000318>
- Basics of set theory: Most, Benjamin A. and Harvey Starr (1989): *Inquiry, logic, and international politics*. Columbia, S.C.: University of South Carolina Press: chap. 3.
- Summary of QCA: Thiem, Alrik (2017): Conducting configurational comparative research with Qualitative Comparative Analysis. *American Journal of Evaluation* 38 (3): 420-433. <https://doi.org/10.1177%2F1098214016673902>

- Discussion of different ways of doing QCA: Thomann, Eva and Martino Maggetti (2018): Designing Research with Qualitative Comparative Analysis (QCA): Approaches, Challenges, and Tools. *Sociological Methods & Research* 49 (2): 356-286. <http://doi.org/10.1177/0049124117729700>.
- Comprehensive textbook: Duşa, Adrian (2019): *QCA with R*. Cham: Springer International Publishing. <http://link.springer.com/10.1007/978-3-319-75668-4> (February 12, 2023).