Tutorial 5.2

# Two Additional Ways of Synthesizing Across Cases

Most case studies will only have a few or even a single case, leading to the analytic choices discussed in Chapter 5 of *Case Study Research and Applications* (6th ed.). However, two other techniques deserve passing mention.

 The first technique assumes the availability of a large number of cases—usually more than 100 case studies. They are likely to have been previously conducted by different researchers and then retrieved by you from various archival sources (e.g., Wolf, 1997; Yin, Bingham, & Heald, 1976; Yin & Yates, 1975). The analytic method follows a variable-based (not case-based) path, thereby reverting to a conventional quantitative approach. The result mimics a “survey” of the case studies—or a “case survey” (Yin & Heald, 1975).

 The case survey requires you to develop and use a formal questionnaire. You query each case study to produce coded, closed-ended responses, a procedure that can readily be subjected to reliability checks by having multiple coders. In using the method, you then analyze the coded data as you would any other survey database. The procedure therefore ignores the in-depth, holistic character of any given case study, much as you would not try to render in detail any given individual respondent in a survey. Of course, as with the conventional survey, you always could complement your survey analysis with a separate inquiry into a small number of the cases, but this inquiry would not be your main analysis.

 The second technique also extracts variables from each case, but starts by amassing each single case’s entire *pattern* of variables. The patterns express the component variables in dichotomous, zero–one terms, effectively creating a within-case analysis before moving to any cross-case synthesis. The analytic technique is known as “qualitative comparative analysis” (QCA) and was developed by Charles Ragin (2014). Unlike a regression or other multivariate statistical analysis, in which the data are first decomposed into individual variables before being reconstituted into any quantitative model, the QCA array preserves the integrity of each case and its potentially unique combination or pattern of variables—including ones that were not necessarily part of the common set of variables.

 The technique has its own software, originally developed by Ragin (Befani, 2013; Rihoux & Lobe, 2009; Rihoux & Ragin, 2009). The procedure assists in tracking the within-case pattern of variables, and each case’s combination of variables can be tallied, ultimately leading to a cross-case synthesis wherein the cases can be grouped and examined according to the differences and similarities among their patterns. Using a replication logic, each case can sequentially build support (or not) for the appropriate theoretical propositions (e.g., Small, 2009).

## Briefly Annotated References for Tutorial 5.3

Befani, B. (2013). Between complexity and generalization: Addressing evaluation challenges with QCA. *Evaluation*, *19*, 269–283. Gives a detailed description of QCA procedures and logic, highlighting their relevance in studying causal relationships and hence usefulness in evaluation research.

Ragin, C. C. (2014). *The comparative method: Moving beyond qualitative and quantitative strategies.* Berkeley: University of California Press. Originally published in 1987; describes qualitative comparative analysis (QCA) as a new and innovative method.

Rihoux, B., & Lobe, B. (2009). The case for qualitative comparative analysis (QCA): Adding leverage for thick cross-case comparison. In D. Byrne & C. C. Ragin (Eds.), *The Sage handbook of case-based methods* (pp. 222–242). London: Sage. Describes and explains QCA procedures.

Rihoux, B., & Ragin, C. C. (2009). *Configurational comparative methods: Qualitative comparative analysis and related techniques*. Thousand Oaks, CA: Sage. Presents the detailed procedures for performing a QCA analysis.

Small, M. L. (2009). “How many cases do I need?” On science and the logic of case selection in field-based research. *Ethnography,* 10*,* 5–38. Poses a thoughtful article on key issues in designing field-based research, including the challenge of generalizing from field situations.

Wolf, P. (1997). Why must we reinvent the federal government? Putting historical developmental claims to the test. *Journal of Public Administration Research and Theory, 3,* 358–388. Analyzes 170 case studies of federal agencies.

Yin, R. K., Bingham, E., & Heald, K. (1976). The difference that quality makes. *Sociological Methods and Research, 5,* 139–156. Examines 140 case studies of technological innovation in local services, highlighting the differences between high- and low-quality case studies.

Yin, R. K., & Heald, K. (1975). Using the case survey method to analyze policy studies. *Administrative Science Quarterly, 20,* 371–381. Describes the techniques used in the case survey method.

Yin, R. K., & Yates, D. T. (1975). *Street-level governments: Assessing decentralization and urban services.* Lexington, MA: Lexington Books. Analyzes 269 case studies of neighborhood services.