

## Case studies

Valery Ridde, Abdourahmane Coulibaly, Lara Gautier

#### ▶ To cite this version:

Valery Ridde, Abdourahmane Coulibaly, Lara Gautier. Case studies. LIEPP Methods Brief n°12, 2023. hal-04102953

HAL Id: hal-04102953

https://hal.science/hal-04102953

Submitted on 22 May 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.









# LIEPP METHODS BRIEF n°12

# 2023

This brief is part of a set of methods briefs published by LIEPP. As such, it is supported by the ANR and the State under the "Investissements d'avenir" programme within the framework of the IdEx Université Paris Cité (ANR-18-IDEX-0001).

# **Case studies**

Valéry RIDDE (IRD, CEPED)

valery.ridde@ird.fr

Abdourahmane COULIBALY (Faculty of medicine and odontostomatology (Mali), IRL « Environment – Health - Societies » UCAD, USTTB, CNRST – Ouagadougou, CNRS – France) coulibalyabdourahmane@gmail.com

## Lara GAUTIER (Université de Montréal)

lara.gautier@umontreal.ca



Distributed under a Creative Commons Paternité.

Attribution-NonCommercial-NoDerivatives | 4.0 International License

https://www.sciencespo.fr/liepp/en.html

How to cite this publication:

RIDDE, Valéry, COULIBALY, Abdourahmane, and GAUTIER, Lara, **Case studies**, *LIEPP Methods Brief* n°12, 2023-05

Publication initialement rédigée en français :

RIDDE, Valéry, COULIBALY, Abdourahmane, et GAUTIER, Lara, **Les études de cas**, *LIEPP Fiche méthodologique* n°11, 2023-05

#### IN A NUTSHELL:

Case studies consist of an in-depth analysis of one or more cases, using a variety of methods and theoretical approaches. The choice of cases (single or multiple) studied is crucial. Case studies are particularly suitable for studying the emergence and processes involved in policy implementation and for contributing to theory-based evaluations.

**Keywords:** Qualitative methods, quantitative methods, mixed methods, case study, theoretical approaches, single/multiple cases, empirical triangulation, analytical generalisation

#### I. What does this method consist of?

Also used in anthropology, the case study approach has long been used in evaluation, where it is considered not as a method but as a research strategy (Yin 2018). By studying a policy in context and using multiple lines of evidence, the case study (single or multiple) seeks to answer 'how' and 'why' questions from a systems approach and with the support of theoretical approaches. Conducting a case study for a public policy evaluation follows a standard evaluation process: planning, drafting the protocol, preparing the field, collecting and analysing data, sharing results and making recommendations for policy improvement (Gagnon 2012). As with all evaluations, the choice of methods should follow the objectives and the evaluation question, not the other way around. A case study may thus mobilise qualitative, quantitative and different mixed methods designs (see separate sheet).

The case study strategy is therefore appropriate when organising an evaluation of policy emergence, process, relevance or adaptation. It is often mobilised when evaluation teams have little or no control over the events and context that influence policy actions. This is often the case outside of experimental situations, which are rare in the field of public policy. It is therefore mostly recommended for understanding a contemporary, often complex, phenomenon organised in a real context.

The case study approach can be used to explain a public policy, describe it in depth or illustrate a specific situation, which can sometimes be original and enlightening for decision-making. The advantage of case studies is that they can be adapted to different situations where there are multiple variables of interest around a policy. It is also about being able to use multiple sources of data, both quantitative and qualitative, which allow for empirical triangulation. The case study strategy allows theoretical propositions and the state of scientific knowledge to guide data collection and analysis. It fits perfectly with, but is not limited to, theory-based evaluation approaches (see separate sheet).

There are a myriad of proposals for the types of case studies that are possible. Firstly, it is possible to use single/single case studies (involving one policy) or multiple case studies (several policies in the same organisational context or one policy in different contexts). Secondly, these cases can be studied holistically (the policy as a whole) or at different levels of analysis (the dimensions of the policy that the intervention theory will have specified or the particular regional contexts). The choice of case studies should be heuristic (to learn from the study) and strategic (to have data available within the available budget, to answer useful questions). A key criterion for case selection is to have sufficiently relevant information to understand the policy in depth and complexity. Case sampling should therefore be explicit, rigorous and transparent. The selection of case studies can thus be critical, unique, typical, revealing, instrumental, etc. This selection can also be carried out in collaboration between the research and policy teams to ensure that the choices are relevant and feasible. The selection can also be based on prior quantitative analyses to obtain the starting situation of the cases and, for example, choose cases that are very contrasting or very similar in their performance with regard to the policy being analysed.

Sometimes it can also be useful to have a diachronic approach in order to produce longitudinal case studies. For example, analysing a policy over time can reveal the influences of changes in the context or in the strategies of those implementing it, or of those benefiting from it. Starting with cases with similar initial conditions and then studying their evolution is referred to as 'racing cases' by Eisenhardt (Gehman et al. 2018).

When analysing the data, the case study approach requires, in addition to the usual analyses specific to the methods (content analysis, thematic analysis, descriptive or inferential statistics, etc.), to mobilise a replication logic. The idea is to compare, in a systematic and rigorous way, the empirical data and the theory, be it the theory of the policy intervention or a theoretical or conceptual framework used to understand the policy. This process is referred to by Yin as analytical generalisation. When several cases support the same theory, it is possible to suggest the presence of a replication logic (Yin 2010).

Configurations can be heuristic tools for this analysis, whether they are organisational or rooted in critical realism (see separate sheet on realistic evaluation). Furthermore, finding similar patterns, or situations, in different contexts strengthens the ability to generalise the results of case studies. Yin believes that analytical generalisation requires the construction of a very strong case that will be able to withstand the challenges of logical analysis. Thus, it is essential to specify this theoretical rationale at the outset of the case study, either by mobilising a theory or from the state of the art without it being entirely specific to the public policy being analysed. At the beginning of a case study, it is therefore necessary to remain at a relatively high conceptual level, at least higher than the policy under study. Secondly, the empirical results of the case study must show how they align (or not) with the theoretical argument at the outset. Finally, it will be necessary to discuss how this theoretical thinking, based on this particular policy, can also be applied to other situations and policies in the particular case study. The fact that, even at the beginning of the case study, a counter-argument (rival hypotheses) was also formulated, and that empirical evidence was sought during the data collection process (which refutes them), reinforces the validity of this process of analytical generalisation. Finally, the power of multiple case studies is that this analytical generalisation is strengthened when the results of one case are similar to those of other cases.

Some research teams even propose that case studies can lead to theory-building, especially when analysing complex objects such as public policies.

#### II. How is this methode useful for policy evaluation?

Before deciding to embark on a case study approach, two preliminary questions should be asked which will determine the appropriateness of the approach:

- 1. Does the phenomenon I am interested in need the case(s) to be understandable? (e.g., Theorybuilding case studies)
- 2. Does the case(s) represent an empirical window that informs the analysis of the wider phenomenon?

Once one or the other has been answered positively, the evaluative questions can be defined:

- Under what real-life conditions can public policy X, piloted in context A, be scaled up in contexts B, C, and D?
- How did the controversy about public policy Y in context B emerge?
- What are the success factors for the implementation of public policy X in context A?
- How were public policies Y and Z implemented in context B?
- Why did public policy X in context A and B fail, while it had positive effects in context C?

- Why did public policy X implemented in context A fail, while public policy Y implemented in the same context A succeeded?
- What is it about the characteristics of public policy Z implemented in contexts A, B, and C that informs μ theory-building case studies?

The case study can be used at any point in the evaluation process, ex ante (at the time of policy design), in itinere (during implementation), or ex post (e.g. to better understand the results produced).

### III. An example of the use of this method in Burkina Faso

Simple and multiple longitudinal case studies were mobilised to study a public health financing policy in Burkina Faso (Ridde 2021).

The World Bank encouraged the government to test in a dozen districts a modality for financing health centres in addition to the state budget. The idea was to organise a performance-based payment system in which health centres and health professionals received additional funds based on the achievement of activity results. For example, for each delivery performed in the centre with a partographer, they received 3.2 euros to be shared between the structure and the staff, according to complex procedures and indicators. Verification and control processes were organised to ensure the reliability of payment claims. To study the emergence of this new policy, we conducted a single case study (focusing on the policy) to better understand its origin, ideas, proposed solutions, people who proposed it, power issues, etc. We employed a literature review and 14 qualitative in-depth interviews with policy makers, funding agencies and experts on the subject. Using an analytical generalisation approach, we compared this emergence to understand whether what happened in Burkina Faso was also happening in Benin.

To study the implementation of the policy in Burkina Faso, we then used multiple longitudinal case studies. For reasons of time and budget, we selected three districts representing the diversity of situations in which the policy was implemented. Then, within each of these districts, we selected six cases from the primary health centres (about 30 per district) and one case that was the referral hospital (only one per district). The six cases were selected according to the three types of financing strategies that the policy wished to test, so two cases per type. We decided to select two cases with the greatest possible contrast within each of the three types: one very performant health centre and one not at all. Performance was calculated using a quantitative method (time series) on the basis of indicators of health centre attendance in the years preceding the policy. This etic analysis (from the external perspective) ranked all the health centres according to their order of performance to support case selection. The latter also benefited from the emic opinion (from the internal point of view) of local health system managers in order to take into account their own perception of the performance of the centres, beyond the quantitative approach which only gives a partial view of performance. Thus, for each of the seven cases selected per district (7x3 = 21), we used multiple sources of data to understand the challenges of policy implementation: analysis of documentation, formal qualitative interviews (between 114 and 215 per district) and informal interviews (between 26 and 168 per district), and observations of situations. A data collection grid was also used to measure the fidelity of policy implementation. In order to better understand the evolution of policy implementation, and in particular adaptations over time, three data collection moments were carried out over a 24-month period, thus following the longitudinal multiple case study approach.

Finally, these case studies have also been fruitful in studying, with a qualitative approach and a long immersion in the field, the unexpected consequences (positive or negative) of this policy. Although this dimension of the evaluation is still too little understood, its implementation in Burkina Faso has shown the relevance of this approach (Turcotte-Tremblay et al. 2017). Limiting oneself to the expected effects, which is often implied by an extreme focus on the sole theory of intervention developed by the teams that define

the policy, reduces the heuristic scope of the evaluation. While successes are essential, challenges may also be necessary to improve public policies with the help of case studies.

For all these approaches, the analysis was carried out in a hybrid manner, both deductive (with respect to the intervention theory or a conceptual framework) and inductive (original empirical data). The comparison between cases, between districts and between countries allowed for an increase in abstraction in an analytical generalisation process.

#### IV. What are the criteria for judging the quality of the mobilisation of this method?

Judging the quality of a complex approach such as case studies requires a global vision, going beyond the specific but essential reflections of the usual methods (quantitative and qualitative). To this end, Yin (2018) proposes to study the quality of case studies in terms of four dimensions:

- Construct validity (studying the expected policy and not something else): using multiple sources
  of evidence, describing and establishing a causal chain, involving stakeholders in the validation
  of the protocol and reports;
- Internal validity (confidence in results): compare empirical data with each other and with theory, construct explanatory logics, account for competing and alternative hypotheses, use logical frameworks/theories of intervention;
- External validity (ability to generalise results): use theories, use the logic of analytical replication;
- Reliability (for the same case study, the same findings): use a policy study protocol, develop a
  case database.

#### V. What are the strengths and limitations of this method compared to others?

The main strength of the case study is its ability to 'incorporate the unique characteristics of each case and to examine complex phenomena in their context', i.e. in real-life conditions (Stiles 2013, 30).

The case study strategy, due to the abundance and variety of the corpus of data 4eneraliz, and the research methods employed (qualitative, quantitative or mixed), most often allows for a rich description of the public policy(ies) being evaluated and the contexts of implementation. This is particularly true of single case studies, which allow for in-depth analysis. With regard to multiple case studies, the main advantage is that it allows for more potential variation, which increases the robustness of the explanation. The downside is that these strategies require a significant time commitment. Thus, the sheer volume of work can be problematic, especially if the deadlines set by the sponsors are short. In addition, if there are several evaluative questions, or a question that invites the linking of implementation issues to outcomes, then it may be necessary to consider combining the case study (which may focus on process analysis, for example) with another complementary research strategy, such as quasi-experimental approaches (Yin and Ridde, 2012). Finally, several biases may arise – the biased choice of case(s), low statistical power when conducting quantitative analyses. These biases may erode comparability across cases or contexts. The rich justification of the choice of cases (public policies) (Stake 1995) and the description of the context(s), as well as the process of analytical 4eneralization, described above, help to reduce the impact of these biases.

With regard to theory-building case studies, both advantages and disadvantages of the case study are identified (Stiles 2013). The case study strategy here consists of comparing different statements from theory with one or more observations. This can be done by describing the few cases in theoretical terms. Thus, although each detail can only be observed once, they can be very numerous and therefore useful for theory building. However, the same biases mentioned above are likely to occur (biased case selection, low statistical power). Confidence in individual statements may be eroded by these biases. On the other hand, as many statements are examined – reflecting a variety of contexts and therefore possible

variations – the overall strengthening of confidence in the theory may be just as important as in a hypothesis testing study.

#### Some bibliographical references to go further

Gagnon, Yves-Chantal. 2012. L'étude de cas comme méthode de recherche. 2nd ed. Québec: *Presses de l'Université du Québec*.

Gehman, Joel. and Glaser, Vern L.. and Eisenhardt, Kathleen M.. and Gioia, Denny. and Langley, Ann. and Corley, Kevin G.. 2018. « Finding Theory–Method Fit: A Comparison of Three Qualitative Approaches to Theory Building ». *Journal of Management Inquiry* 27 (3): 284-300. <a href="https://doi.org/10.1177/1056492617706029">https://doi.org/10.1177/1056492617706029</a>.

Ridde, Valéry, éd. 2021. Vers une couverture sanitaire universelle en 2030 ? Éditions science et bien Commun. Québec : Canada: Zenodo. https://doi.org/10.5281/ZENODO.5166925.

Stake, Robert E. 1995. *The Art of Case Study Research*. Thousand Oaks, CA: SAGE Publications. Stiles, William B. 2013. « Using Case Studies to Build Psychotherapeutic Theories ». *Psychothérapies* 33 (1): 29-35. https://doi.org/10.3917/psys.131.0029.

Turcotte-Tremblay, Anne-Marie. and Ali Gali-Gali, Idriss. and De Allegri Manuela. and Ridde, Valéry. 2017. « The Unintended Consequences of Community Verifications for Performance-Based Financing in Burkina Faso ». *Social Science & Medicine* 191 (octobre): 226-36. <a href="https://doi.org/10.1016/j.socscimed.2017.09.007">https://doi.org/10.1016/j.socscimed.2017.09.007</a>.

Yin, Robert K. 2010. « Analytic Generalization ». In *Encyclopedia of Case Study Research*, par Albert Mills, Gabrielle Durepos, et Elden Wiebe, 6. 2455 Teller Road, Thousand Oaks California 91320 United States: SAGE Publications, Inc. https://doi.org/10.4135/9781412957397.n8.

Yin, Robert K. 2018. Case study research and applications: design and methods. Sixth edition. Los Angeles: SAGE.