NERUPI network
Evaluating & Researching University Participation Interventions

Description:

The comparative case study approach sees cases as complex systems and looks for patterns, identifying plausible explanations and excluding other explanations. The method involves multiple case study research in the sense of an in-depth examination of an intervention, process, organisation or participant. The cases are selected to gather generalisable knowledge about the causes of outcomes – e.g., how and why a particular programmes worked. The approach differs from traditional forms of analyses because it focuses on specific cases rather than on specific variables and their average effects (i.e., variable-oriented knowledge). Comparative case studies draw on cases over time and/or in different contexts.

Strengths:

Comparative case studies can answer questions about what causes the outcomes and can be particularly useful for understanding the effect of different contexts. They can examine a specific element or context in detail – the 'why' and 'how' questions - where causal mechanisms have already been identified.

Case study reports describe what happened in lay terms and therefore have the advantage of being accessible to a range of non-technical audiences.

Weaknesses:

The selection of cases is based on getting a range of examples across various dimensions (e.g., different locations or groups) rather than how well they will inform the causal analysis. The approach might be criticised for focusing on 'positive' results and ignoring the overall effects.

The analysis of cases tends to be descriptive so causal propositions are not rigorously tested (although the approach does aim to address the complexities of what happens in real world social situations).

Case study research can be resource-intensive if extensive fieldwork is required. If resources are limited there may be a trade-off between selecting a small number of cases in-depth or focusing on a larger number of cases using existing evidence or secondary data.

Time lags in activities or data availability may make in-depth comparisons across cases problematic in practice (although this might be dealt with if the research is built in from the start).

Requirements:

There needs to be an understanding of each case in the first instance to develop a framework for cross-case comparison.

Ideally comparative case studies would be informed by a good programme theory of change, which would decide the properties and dimensions of the cases to be explored alongside new lines of inquiry.

There needs to be the opportunity to assess interventions across multiple cases or contexts. Ideally the approaches need the opportunity for iterative data collection and analysis. Comparative case studies are time and resource intensive because they involve an iterative process of proposition, evidence collection, analysis and synthesis.

The specific features of each case need to be described in depth, which involves collation and triangulation of evidence. Triangulation might involve quantitative and qualitative evidence, so the evaluator will need skills in both methodologies and be able to synthesise findings and employ critical reasoning to make sense of the evidence.

The approach relies on the ability to theory test. Techniques such as qualitative comparative analysis and process tracing might be involved.

Mixed methods:

Comparative case studies use mixed methods which integrate qualitative and quantitative data together to gain an in-depth understanding of the cases. Primary research could be through interviews, focus groups, observations, and document analysis etc. Triangulation of data is helpful to address the inherent weaknesses of any single method. Project documentation and monitoring/performance measures could be the starting point. Participatory approaches could be used to build stakeholder ownership of the process.

Case studies can add value to the results of experimental and/or quasi-experimental designs. For instance, case studies could help to explain any variations in observed outcomes.

Ethical issues:

Ethical issues depend on the design, but there should be a common research protocol drawn up across the board if the studies include a fieldwork component. A key issue is the level of detail needed whilst ensuring that participant confidentiality is maintained. The format might need to be negotiated with the research participants.

Work planning:

The starting point is the theory of change, which together with the key questions for the evaluation, will guide the selection of cases and the dimensions to be included in the research. It could be that the research seeks to test initial propositions or theories of change. The rationale for selecting the cases should be linked to the key evaluation questions for the study.

The unit of analysis will depend on which group's response to the intervention is of interest (i.e., individuals, groups, organisations, sectors). There could be consideration of embedded units of analysis, for example, thinking about the case of teachers as part of an analysis of mechanisms in schools.

Decisions on the selection of cases has implications for addressing causality. Clarity on the selection criteria is important (rather than just selecting cases pragmatically because of convenience). The number of cases is usually limited to be able to get an in-depth understanding of each situation and there could be a trade-off in terms of the depth or breadth of the research.

Once the type of cases has been decided, the evaluators need to decide how the case study research will be conducted. Ideally there should be scope for iteration. For example, it could be that an initial consideration of the cases leads to the conclusion that certain conditions helped to generate more successful outcomes, but it would be premature to claim that these attributes had produced the results. The test would be to identify a successful case that didn't have the characteristics, and one which did but was unsuccessful. In this way the proposition would be tested, and other features underpinning success could be identified. Staging the data collection may be useful for theory testing and elaboration of the causal mechanisms and conditions.

It can be helpful to categorise cases according to different dimensions (e.g., the level of engagement on a scale from weak to high). The goal is to explain the how the outcomes of the cases are influenced by the context. Several factors might be associated with success, and an examination of the dimensions can provide insights into the critical elements of success. There is an overlap here with critical qualitative analysis (QCA) which documents the configuration of conditions associated with each case, usually in a 'truth table', to show the conditions that can account for all the observed outcomes. Alternatively process tracing would judge the evidence within a case to assess the plausibility of different possible explanations.

Analysis:

Comparative case studies involve analysis and synthesis of the patterns and the similarities/differences across the cases. Therefore, evidence needs to be collected, analysed and synthesised both within and across cases. Ideally the cases should allow the evaluator to be able to consider and test alternative explanations for the outcomes.

A lot of analytic and synthesising work is needed to draw out the similarities and differences to be able to support or refute propositions as to why an intervention worked (or not). The focus is on examining the causal processes. Cross-case analyses is based on using pattern matching logic, i.e., comparing the patterns between cases to explain the observed processes or behaviours. Consideration could be given to comparisons of different programmes as they operate over time or in different contexts; comparison of anticipated outcomes with actual outcomes; comparison of the perspectives of different groups. The approach needs to consider and test alternative explanations about the outcomes. Triangulation can be used to identify and rule out alternative explanations or explain exceptions to the main pattern observed. Analysis is therefore undertaken iteratively – i.e., initial data collection and analyses informing further data collection and analysis.

Conclusions about the transferability of the results is based on thinking about the how the characteristics of success relate to the contexts (rather than from a sample to the population as a whole in traditional methods).

Reporting:

The reporting is focused on drawing out how the programme contributed to the outcome through describing and in interpreting the cases, especially in terms of the similarities and differences across

contexts. The emphasis is on generating an explanation of specific outcomes in cases rather than on causes across a larger number of cases, which is the traditional statistical emphasis which may not pay attention to factors across the context of the cases themselves.

The rationale for the selection of the cases needs to be clear and the report should describe how cases were developed and tested. The report should include examples from the data which back up the claims made. The issue will be at what level of detail to include in terms of describing and interpreting the cases. The style and presentation of case study evidence is crucial to address comparative questions so summary tables or data organised by themes can be helpful.

Decisions on the format and presentation of case studies should be made early in the process so that the data is collated to inform the case. Decisions might have to be made out about what to leave out of the report, but this should be made clear to the audience. Appendices could be used to provide supplementary information.

Useful links:

Davies, Rick, 'Qualitative Comparative Analysis', web page, Better Evaluation, 2013. See http://betterevaluation.org/evaluationoptions/qualitative_comparative_analysis.

Yin, Robert K., (2014) Case study research: Design and methods, fifth edition, Sage, Los Angeles.

Ragin, Charles C., and Garrett A. Schneider, 'Case oriented theory building and theory testing', in M. Williams and W.P. Vogt (eds.), The Sage Handbook of Innovation in Social Research Methods, Sage, Los Angeles, 2011, pp. 150–166.