

Causal Analysis for Complexity

A growing suite of methodological approaches make causal analysis possible in complex systems. Causal methods can challenge and strengthen the often uncontested beliefs that underlie philanthropic interventions, while offering evidence about enabling contexts and system drivers. Strong causal analysis considers not only the funder’s model and assumptions, but also the beliefs others hold about how and why change occurs, opening the door to more equitable and less biased ways of understanding change.

Non-Experimental Causal Designs and Methods

Approach	Methods	Basis for Making a Causal Claim	When and Why to Use It
Theory-Based Approaches	<ul style="list-style-type: none"> • Contribution analysis • Process tracing • Realist evaluation • General elimination methodology • Qualitative impact assessment protocol • Multiple lines and levels of evidence • Innovation history 	In-depth theoretical analysis of causal processes or mechanisms in context	<ul style="list-style-type: none"> • There is a strong theory of change • Differences in context are likely to matter • It is important to examine effects for specific groups
Participatory Approaches	<ul style="list-style-type: none"> • Most significant change • Outcome harvesting • Collaborative outcomes reporting • Collaborative yarning • Rapid outcome assessment 	Validation by participants that their actions and experienced effects are “caused” by the intervention	<ul style="list-style-type: none"> • To capture multiple understandings of change and unintended consequences • More timely and affordable • Sample size is small
Case-based Approaches	<ul style="list-style-type: none"> • Within-case • Across-case 	Analysis of causal processes within a case or across multiple cases	<ul style="list-style-type: none"> • To identify causal factors across cases when effects are known
Systems-based Approaches	<ul style="list-style-type: none"> • Causal link monitoring • Causal loop diagramming • Statistically-created counterfactual 	Building a conceptual model of the causal relationships at work, and verifying it with empirical data for each variable, mathematical formulas, or computer simulation	<ul style="list-style-type: none"> • To example multiple interdependent causal and nonlinear feedback processes

Debunking Myths about Causal Analysis in Philanthropy

Misunderstandings and misinformation are at the root of much of the sector’s hesitancy to focus evaluation on cause-and-effect relationships. These misunderstandings are repeated so often that they have become a powerful set of myths about causal analysis and its relationship to rigor, usefulness, and equity. It is past time to debunk these myths.

Myths	Debunking
1. Randomized control trials (RCTs) or quasi-experiments are the only ways to test cause-and-effect relationships.	There are a broad set of non-experimental methods that give us a wide range of rigorous options to choose from, many of which are a much better fit for complexity (look on the other side to see a list).
2. There are no rigorous non-experimental designs for examining causality.	We think about rigor as the practice of embedding sound evaluation principles and practices: systematically collecting and analyzing data to make sure the conclusions drawn are accurate and credible; openly discussing and exploring possible alternative conclusions; and using participatory approaches for interpreting results and identifying their implications.
3. Causal designs focus on the past and do not help with future decision-making.	Having better evidence about how change happened has a number of benefits for future decision-making. Building a stronger base of knowledge about complex change can strengthen future strategy decisions in related work.
4. Causal designs are summative only and cannot be used for real-time decision-making.	Some causal methodologies (e.g., outcome harvesting) are appropriate for ongoing implementation, capturing insights about specific interim outcomes and other types of systems changes as they emerge.
5. Causal designs are not appropriate for complex settings.	Many non-experimental causal analysis methods recognize complexity, seeking to validate causal pathways through multiple perspectives and to understand the impact of larger system dynamics.
6. Causal designs are too burdensome for participants.	Strong implementation of causal methods in complex settings does require stakeholder participation. Burden should be assessed not just based on the time required for participation; it should also be judged on the value received from the output.
7. Causal designs cannot be implemented in ways appropriate for working with communities.	This assumes community partners lack the ability to engage with and understand an evaluator’s analytical approaches. The solution here is not to pick simplified methods, it is to offer space, time, and opportunity for learning.
8. Causal designs are rooted in white supremacy.	Non-experimental causal designs include mixed methods that seek to understand multiple dimensions through different lenses. Many of these methods either explicitly acknowledge different ways of knowing, or are designed so the sources of evidence are not limited to one way of knowing.
9. Causal designs center philanthropy’s ideas about change.	While this practice of centering the foundation’s ideas about change is typical, it is more about traditional power dynamics in philanthropy and longstanding foundation-and-evaluator routines and habits than it is about evaluation methods.

Source: Lynn, J., Stachowiak, S., & Coffman, J. (2021). Lost Causal: Debunking Myths About Causal Analysis in Philanthropy. *The Foundation Review*, 13(3).

Causal Pathways is a new initiative to help philanthropy and other funders open-up the black box of strategy and systems change through evaluation approaches that can make sense of causal relationships without depending on more traditional experimental and quasi-experimental approaches.

