

Learning how things work

Exploring Process Tracing with Derek Beach

The European Commission EvalVoices initiative is a platform for dialogue and learning within the global evaluation community. It brings together practitioners, researchers, policymakers and evaluation managers to reflect on how evaluation practice is evolving and how different approaches help us better understand change. Anchored in the European Commission's "evaluate first" culture and aligned with the EU Evaluation Policy and Better Regulation Guidelines, EvalVoices encourages exchange, reflection and shared learning across the field of evaluation.

Launched by the European Commission, DG INTPA, DG ENEST, DG MENA and FPI, the EvalVoices initiative builds on earlier efforts such as EvalCrisis and evaluation in hard-to-reach areas.

Following our inaugural session with [Michael Quinn Patton on Evaluation Science](#), our second webinar took a deep dive into Process Tracing (PT), an increasingly recognised method for uncovering how and why interventions work. Led by Professor Derek Beach, a leading scholar from Aarhus University and co-author of *Process-Tracing Methods: Foundations and Guidelines*, the session brought together 134 people from across the world for an engaging exploration of one of the most insightful tools in qualitative evaluation.

From “What Works” to “How It Works”

As Derek reminded us, we often ask “what works?”, yet the more transformative question is “how does it work — and under what conditions.” That is precisely where Process Tracing comes in. PT is an in-depth theory-based case study method that helps evaluators empirically trace the process through which an intervention produces a contribution. It looks not just at results, but at the mechanisms, interactions, and contextual factors that bring about those results.

In simpler terms, process tracing helps evaluators go beyond linear cause-and-effect models to unpack the real-world complexities that shape change. As Derek put it, “it’s about tracing the story between the intervention and the outcome, the

actions, reactions, and linkages that make things work.”

Why Process Tracing matters for evaluation stakeholders

For evaluation stakeholders, whether they design evaluations, conduct them, or use the findings, Process Tracing offers significant benefits. It allows commissioners and evaluators to:

- Understand causal mechanisms rather than mere correlations.
- Test whether interventions produced contributions as intended.
- Identify contextual enablers and barriers that explain why something succeeded or failed.
- Learn from both positive and deviant (failed) cases, turning surprises into learning opportunities.

This makes PT particularly useful when the goal is to strengthen the credibility and learning value of evaluations, not just to verify outcomes. As Derek highlighted, PT can also help refine [Theories of Change](#) (ToC) by making the causal assumptions explicit, i.e. translating abstract linkages into observable activities and interactions among real actors.

In policy and strategic planning, PT-inspired theorisation can even inform design, not just evaluation. As Derek noted, “the front-end work of theorising processes can help design more meaningful indicators for monitoring.”

Action points for evaluation managers and evaluators

During the webinar, Derek discussed how commissioners might decide when and how to use Process Tracing in Terms of Reference (ToRs):

“Use Process Tracing when you really want to understand how an intervention produced its effects, whether for learning or accountability.”

Here are some practical action points emerging from the discussion:

1. *Incorporate PT when “how” questions matter most:* If you are commissioning an evaluation to understand not only whether something worked but how and why, PT is worth prioritising.
2. *Start with a process-oriented Theory of Change:* Use available programme documents or early brainstorming with stakeholders to sketch out how activities and actors might have interacted. Refine this as evidence emerges.
3. *Be flexible and iterative:* Process Tracing thrives on iteration, i.e. continually revising the theory as new evidence is gathered and tested.
4. *Be explicit about evidence:* Evaluate each piece of evidence critically: ask whether it confirms, disconfirms, or suggests alternative explanations. As Derek explained, “we must act as our own worst critics because that’s what guards us against confirmation bias.”
5. *Think comparatively:* Where possible, use lighter PT analysis across several cases to see whether similar processes hold in different contexts.
6. *Blend methods:* PT can sit comfortably within broader mixed-method evaluations (even alongside [Randomised Control Trials](#) (RCTs) or contribution analyses), to deepen causal understanding.

Process Tracing in practice: a different way of knowing

Unlike [realist evaluation](#), which looks for universal behavioural “mechanisms”, or contribution analysis, which often treats linkages as assumptions, Process Tracing works by empirically evidencing

those linkages through the actions and interactions of real people. It’s about tracing fingerprints, that is, the observable traces of change.

In his presentation, Derek illustrated this through a fascinating example: a study on sugar-sweetened beverage taxation. By tracing how public awareness, perceptions, and industry responses interacted, evaluators found that while the tax reduced soda consumption, it had little effect on juice, because the juice industry managed to reframe its products as “healthy.” PT revealed why the same intervention worked differently across contexts, an insight that purely quantitative analysis would have missed.

This “how and why” lens makes PT uniquely suited to the complexity of development interventions, where outcomes often depend on multiple actors, contexts, and feedback loops.

Questions from the field: what evaluation practitioners wanted to know

Our participants (from within the EU institutions, and external evaluators and evaluation stakeholders) raised a wide range of thoughtful questions. Some wanted to know when to use PT; others asked how to collect evidence or whether PT could handle unexpected outcomes.

Here are a few highlights from Derek’s responses – both from the webinar, as well as the bonus Podcast episode with him):

- **On starting points:** you don’t have to begin from scratch. Existing programme theories, literature, or even early interviews can serve as a starting point for building your process theory.
- **On evidence collection:** interviews are useful but should be treated critically; “a good evaluator is like a good journalist”, Derek said, always probing for supporting documents or alternative accounts.
- **On participatory methods:** participatory approaches can help identify relevant cases, provided evaluators remain reflexive and critical about potential biases.
- **On unintended effects:** a PT often helps surface outcomes that were never planned but are highly significant.
- **On confidence in evidence:** the threshold depends on the purpose, “beyond reasonable doubt” for accountability evaluations; more exploratory standards for learning studies.
- **On common mistakes:** insufficient

theorisation. Many beginners, Derek observed, “don’t spend enough time making their process theory explicit.” That’s what gives PT its analytical power.

The central message from the discussion is that Process Tracing is not just about proving causality. It’s about learning and about understanding how change actually happens.

Further reading and resources

- [Working with interviews in Process Tracing evaluation methods](#), Camacho Garland, Gabriela, Derek Beach, and Johannes Schmitt (2025), *Evaluation*, 0(0).
- [Theorizing how interventions work in evaluation: Process-tracing methods and theorizing process theories of change](#), Camacho, Gabriela and Derek Beach (2023), *Evaluation*, 29(4): 390-409.
- [Process-Tracing Methods in Program Evaluation](#), Beach, D., & E. Raimondo (2025), World Bank Publications.
- [Evidence of a health risk ‘signalling effect’ following the introduction of a sugar-sweetened beverage tax](#), Alvarado, M., et al. (2021), *Food Policy*, 102.

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