

Making Causal Claims

Workshop

on

Impact, Learning and Innovation

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The Context

- Development impacts result from a mix of actions and context:
 - the actions of the intervention
 - other events and conditions at play
 - other interventions at work
 - other relevant contextual factors
- We want to know what the intervention accomplished? Did it make a difference?

Improving education outcomes for girls

Intervention operates through raising the knowledge, skills and awareness of teachers.

Other relevant factors here might be:

- the willingness of teachers to support the education of girls
- the support of parents for their daughters to attend schools and study at home
- the ability of girls to get to the schools
- the adequacy of the schools to accommodate girls

Conceptualizing Causality

What kind of causal relation exists then between a development intervention (X) and an impact (Y)?

- Can we say X causes Y? No
- Is X necessary for Y? No
- Is X sufficient for Y? No

But we clearly want to make some causal link between the intervention and the impact

Conceptualizing Causality

- An intervention works as part of a broader causal package. And if it works, then this causal package is indeed sufficient to bring about the impact.
- Further, if the intervention is 'working', then it is an essential part of this causal package
- An INUS cause

Intervention Causality

- Thus, an intervention “made a difference” when:
 - The *intervention causal package* was sufficient to bring about the impact, and
 - The intervention was a necessary component of the causal package
- The intervention in this case is a *contributory cause*. On its own it is neither necessary nor sufficient.

The Intervention as Trigger

Intervention is one among several 'causes'. But is that all? We probably expect more, that the intervention:

- acts as a trigger to start the causal chain (the spark that lights the fire)
- and may act as sustaining support for change along the way (gasoline to keep the fire going)

A principal contributory cause

Meaningful Causal Questions

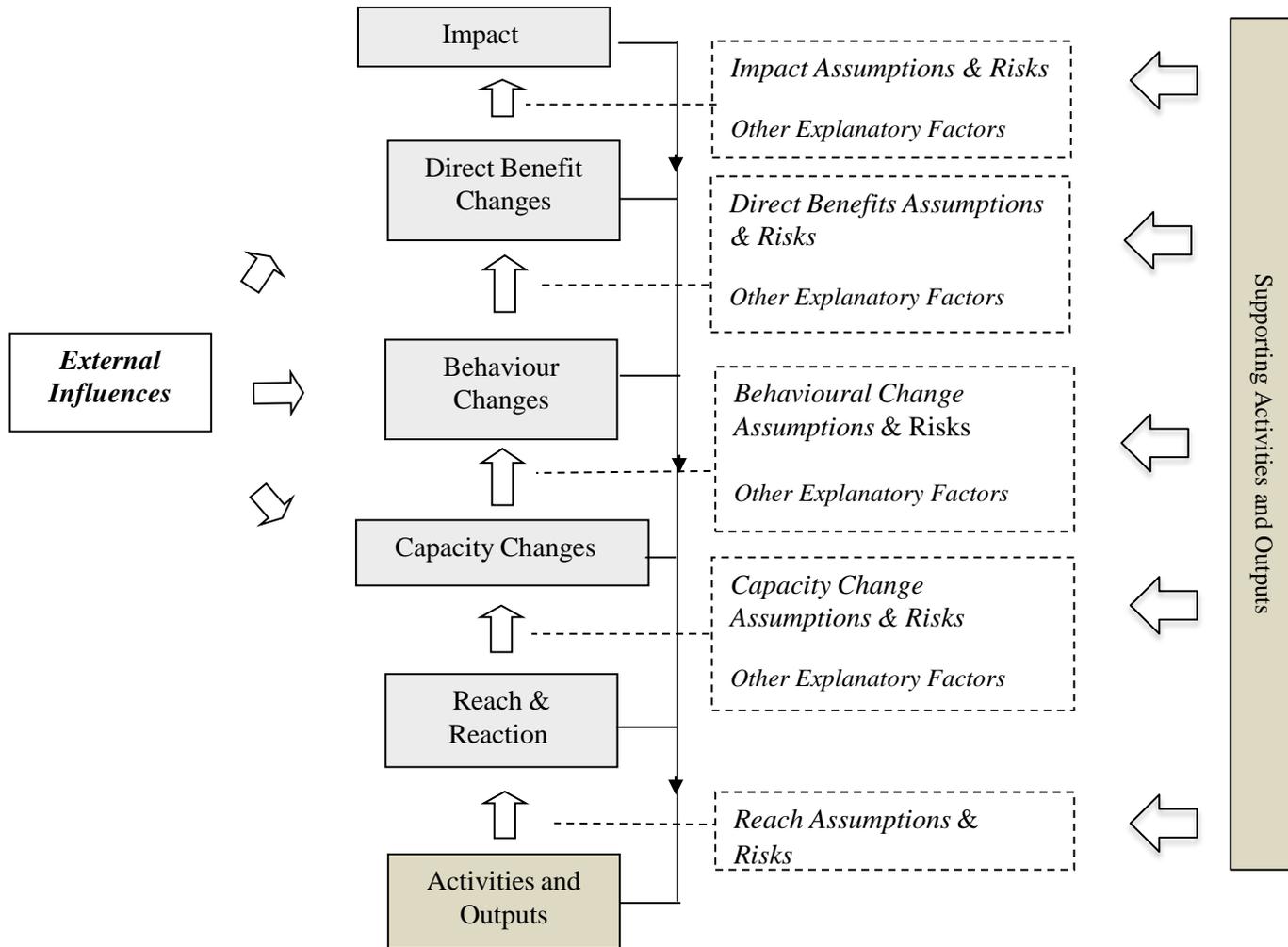
1. Has the intervention *made a difference*?
 - Is the intervention a contributory cause?
2. Why has the impact occurred?
 - How did the causal factors bring about the result?
 - What was the context and the mechanisms?
 - What role did the intervention play?

Demonstrating Contributory Cause

How then to show that the intervention made a difference?

1. Connecting to theory-based approaches
2. Sufficiency through generative (process) causality theory-based approaches, such as contribution analysis

A Generic Theory of Change



Theories of Change and Causal Packages

- *Theories of change are causal packages, and more:*
 - ToC identify supporting factors (assumptions) and confounding factors (risks)
 - ToC set out the relationship between the supporting factors and the intervention
- *ToC is a model of the intervention as a contributing (INUS) cause*

Four approaches to causal attribution

- *Regularity frameworks* that depend on the frequency of association between cause and effect - basis for statistical approaches
- *Counterfactual frameworks* that depend on the difference between two otherwise identical cases - basis for experimental and quasi experimental approaches
- *Comparative frameworks* that depend on combinations of causes that lead to an effect - basis for 'configurational' approaches, such as QCA
- *Generative frameworks* that depend on identifying the causal links and 'mechanisms' that explain effects - basis for 'theory based' and 'realist' approaches.

Contribution Analysis

Using a generative perspective on causality, CA shows that an intervention is a contributory cause:

- The expected result occurred
- The causal package is sufficient
 - supporting factors (assumptions) occurred and any other supporting factors have been included in the ToC
 - plausible rival explanations have been accounted for
- The intervention is necessary for the package to be sufficient
- And can explore the role the intervention played, such as a trigger

Main Messages

- We expect most interventions are **principal contributory causes**
 - The intervention causal package is sufficient & the intervention is essential to the package
- Want to also know **why** the impact occurred; to be able to explain
- **ToC are models** of the intervention as a contributory cause
- Contribution analysis and other T-B approaches can be used to explore and **demonstrate** contributory causes

Some References

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