

Disentangling policy effects into causal channels

Splitting a policy intervention's effect into its causal channels can improve the quality of policy analysis

Keywords: causal channels, causal mechanisms, mediation analysis, direct and indirect effects

ELEVATOR PITCH

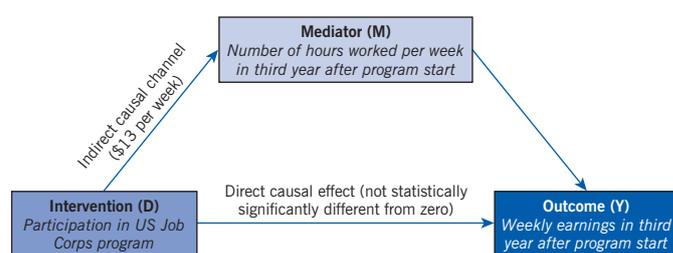
Policy evaluation aims at assessing the causal effect of an intervention (for example job-seeker counseling) on a specific outcome (for example employment). Frequently, the causal channels through which an effect materializes can be important when forming policy advice. For instance, it is essential to know whether counseling affects employment through training programs, sanctions, job search assistance, or other dimensions, in order to design an optimal counseling process. So-called “mediation analysis” is concerned with disentangling causal effects into various causal channels to assess their respective importance.

KEY FINDINGS

Pros

- + Mediation analysis of a particular policy effect gives a better understanding of why specific policy interventions are effective or ineffective.
- + Mediation analysis directed at a policy effect's causal channels is likely to result in better policy advice, particularly with respect to the optimal design of the various components of a policy intervention.
- + Analyzing causal channels helps to understand the aspects of an intervention whose effectiveness appears particularly interesting (i.e. more relevant than that of other aspects).

Disentangling the effect of an intervention into direct and indirect channels



Note: The US Job Corps program targets those aged 16–24 from low-income households. The program's earnings effect was driven by increased labor market supply, while no significant effect was found on the hourly wage.

Source: Author's own illustration based on [1].

IZA
World of Labor

Cons

- Analyzing causal channels requires stronger behavioral (or identifying) assumptions than evaluating the “conventional” (total) causal effect of a policy intervention.
- Sufficiently rich data, which plausibly justify key behavioral assumptions, are needed to analyze causal channels; panel data are typically required in these cases, but are not always available.

AUTHOR'S MAIN MESSAGE

Policy evaluations have widely neglected the potential merits of analyzing causal channels to deliver more accurate policy advice. Mediation analysis appears increasingly attractive in a world with growing availability of rich data, even though it relies on non-trivial behavioral assumptions and comparably strong data requirements. The assessment of causal channels by mediation analysis should thus be considered for future policy evaluations. For instance, when investigating the extent to which a labor policy's effect on earnings comes from increased search effort, increased human capital, or other mediators that are themselves affected by the policy.