Causal modeling

USAID MENA Advanced MEL Workshop

2024-06-21

Welcome!

- Who we are
- What we do
- How we hope to help you

Objectives of workshop sessions

- Introduce advanced-level content around Monitoring, Evaluation, and Learning (MEL)
- Review current trends in data analytics, causal inference, machine learning, and Artificial General Intelligence (AGI)

Benchmarks for success

By the end of this session, participants will be able to:

- Understand USAID practice around causal modeling
- Introduce new analytical developments that can extend USAID practice of causal modeling and link it to impact evaluation and learning agendas
- Identify management opportunities to incorporate best practice and new trends into activity implementation

Benchmarks for success

Bonus content:

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Level Set

How does USAID do causal modeling?

- ADS 201
- How-To Note: Developing a Project Logic Model
- Technical Note: The Logical Framework
- In Defense of Logic Models

Logic model

- A graphic or visual depiction of a theory of change that illustrates the connection between what a strategy, project, or activity will do and what it hopes to achieve
- There are a wide range of logic models
  - Results Framework
  - LogFrame
  - Causal loop diagram

Results Framework

- A type of logic model representing the development hypothesis of a USAID mission's strategy
- Diagrams the causal links between the strategy's Goal, Development Objectives (DOs), and Intermediate Results (IRs)

LogFrame

- Complements the CDCS Results Framework by carrying the development hypothesis through from the overall program/project to the supporting activities
- LogFrame replicates the causal linkages, but starting from a Development Objective and ending with activity inputs
- While the Results Framework is a strategic planning tool, an activity's Logical Framework defines exactly what resources are needed to achieve results

Causal loop diagram

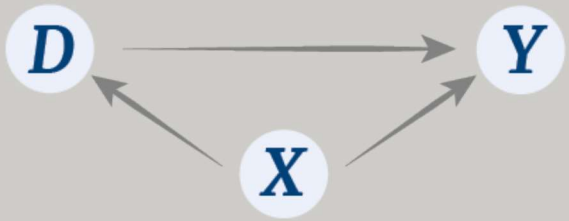
- Identifies the primary variables of a complex system and visualizes their relationships

New directions

Directed Acyclic Graphs (DAGs)

The four confounds

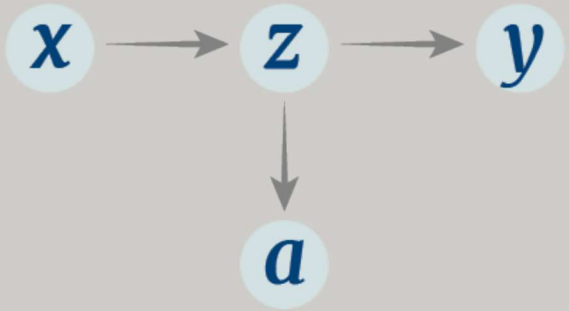
The Fork



The Pipe

The Collider

The Descendant



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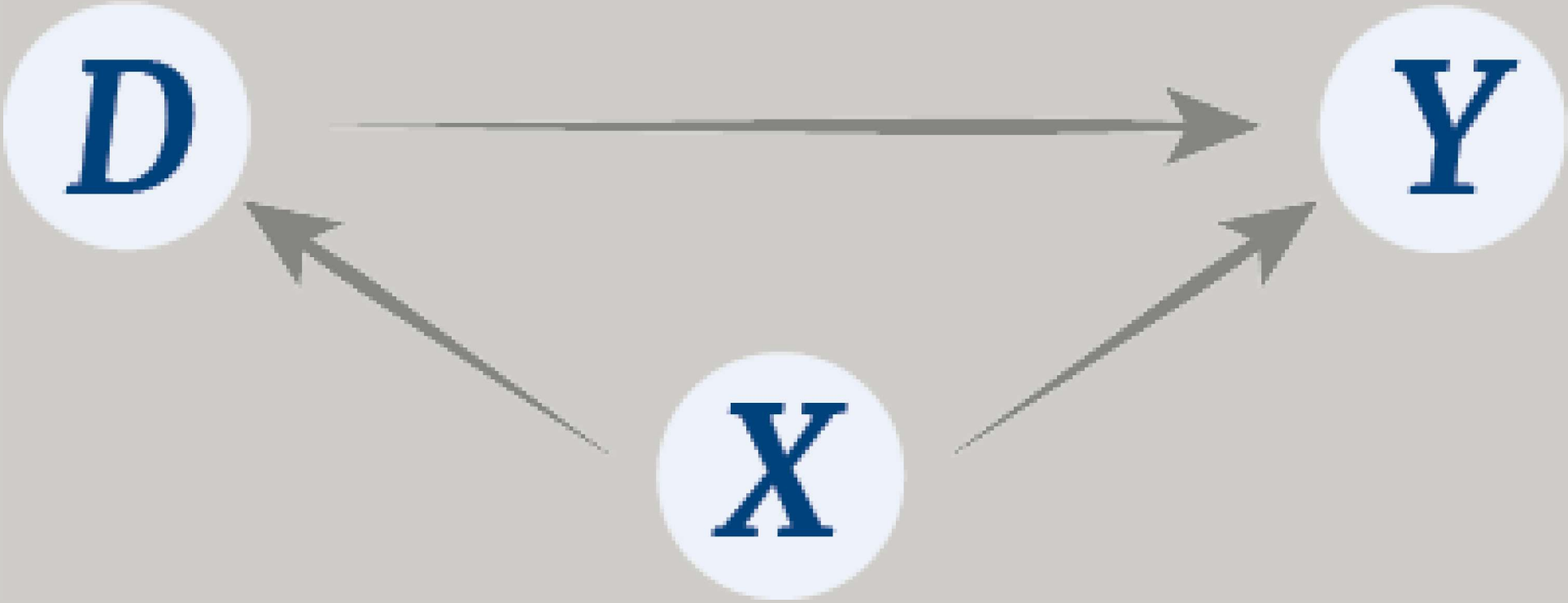

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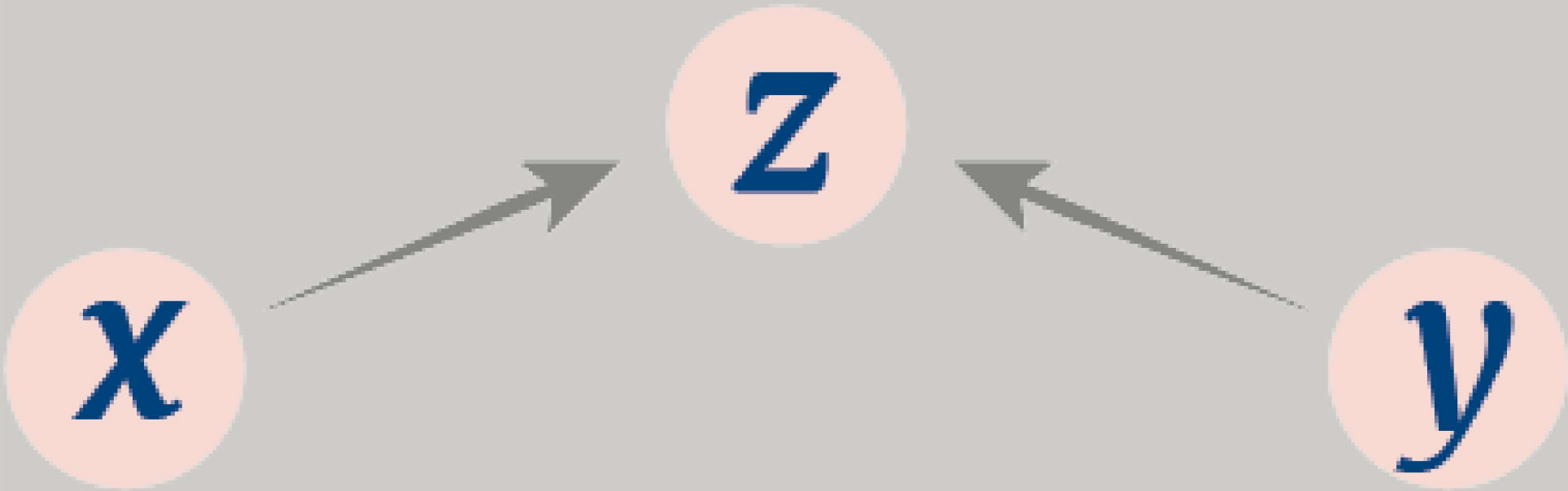

The Descendant