Evidence for action in new settings: The importance of middle-level theory

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Assumption

For reliable prediction evaluation for a new setting

Thick local causal model
Middle-level theory tools for constructing these
Middle-level ‘theory’
MIXED BAG 3 TOOLS

- ToCs
- Mechanisms
- Markers
Plan

1. ToCs
2. Mechanisms
3. Markers
4. What we should demand of programme developers
Tool 1
Middle-level ToCs
Theories of action/change

- “... the underlying theory of action—how the program’s resources, activities, and outputs lead to desired outcomes....
- ... the processes, actions, and events through which the program resources achieve the intended outcomes; they are the steps in implementing a program.”

Kekahio, Lawton, Cicchinelli, & Brandon
DD == Democracy dyad
VPPO = Voters perceive powerful opponent
VDL = Voters dislike losing
VAW = Voters against war
LA = Leaders aim to avoid war
PR = Peaceful resolution
Causal Loop Diagram exploring systemic impact of efforts to improve social work through increased prescription of practice

Developed in collaboration with Dr David Lane, London School of Economics and Political Science.
RESOURCES IMPACTS

- Teacher professional development
- Networked computers with microphones and headsets and teacher workstation
- Time set aside in a 90-minute block for instruction 5 days per week
- Cassette players with headsets
- Audiobooks, Paperbacks, Topic Software for READ 180
- Classroom size and arrangement adequate for READ 180 Instruction

ONGOING TEACHING/LEARNING ACTIVITIES

- 20-minutes Whole-Class Direct Instruction to start the class
  - Teachers regularly use READ 180 instructional strategies and materials contained in READ 180 program guides
  - Small-group rotations—Students divided into 3 groups each spending 20 minutes rotating through:
    - Small-Group Direct Instruction
    - Independent and modeled reading
    - Use of READ 180 Topic Software
  - 10 minutes of Whole-Class Direct Instruction to conclude the class
  - Teachers and administrators regularly use diagnostic tests (SRI) and Scholastic Management Suite™ for continuous assessment, placement, and monitoring

SHORT-TERM OUTCOMES

- Improved reading skills
- Improved classroom behavior
- Increased motivation

LONG-TERM OUTCOMES

- Increased scores on achievement tests
- Increased school attendance rate
- Decreased disciplinary incidents
- Improved learning in all subject areas

Contextual effects such as the characteristics of the school district, other instructional programs in use, and external events
For each local setting
2 Ways to Thicken soups & gravies with fewer carbs

donharelish.com
Thickening 1

Abstract/ general concepts

Specific
Figure 3: A systemic logical model for M4P enables better capture of M4P impact.
Figure 1. Framework for actions to achieve optimum fetal and child nutrition and development.\cite{21}
Thickening two

At each step, fill in

- Support factors
- Derailers/ interrupters
- Off-setters
Tool 2
Middle-level ‘Mechanisms’
Roughly speaking, mechanisms are frequently occurring & easily recognizable causal patterns that are triggered under generally unknown conditions or with indeterminate consequences.
Elster-type ‘mechanisms’

- Dispositions/behaviours that are common in individuals or institutions (sometimes location relative)
- Highly defeasible
- May need triggering
- What happens when they operate depends on the context
Knowing what mechanism should operate at each step = a powerful tool for context-thickening a middle-level ToC
Liberal ideas → Ideology → No wars against democracies → Constraints on govt. → Democratic Peace

Liberal ideas → Institutions → Free debate → Constraints on govt.
People informed T by sources deemed reliable tend to believe T
C dislike losing
C predict lose to N
C oppose war w N
C don’t want to lose
‘Reliable’ info source
C bel N = dem
C bel dem = power
C don’t want to lose
Free elections
Leaders like jobs
Leaders seek peace
N = dem
Reliable info source
C bel N = dem
C bel dem = power
C don’t want to lose
Leaders seek peace
Free elections
Leaders like jobs
People choose what maximizes their expected utility

Leaders seek peace

Free elections

Leaders like jobs

C oppose war w N

C don’t

C predict lose to N

N = dem

‘Reliable’ info source

C bel N = dem

C bel dem = power
Fear is paralyzing
Where can these mechanisms produce the requisite pathway?
Tool 3
Markers
Social systems: afford causal pathways
Figuring out what the local system is like and what pathways it affords is

- Difficult
- Costly

Markers can suffice
System markers

- Manufactured items come with labels, logos
- God-made structures are often recognisable ‘from the outside’
- What about social systems?
C don’t want to lose to N.

Leaders like jobs.

Free elections.

Leaders seek peace.

Democracy

N = dem

‘Reliable’ info source

C bel N = dem

C bel dem = power

C predict lose to N

C don’t want to lose

C oppose war w N
Common development markers

- Democracy?
- Good governance?
- Growth/ GDP?
- Women’s participation?
- Foreign direct investment?
- …
So...

- Best way to get reliable prediction/evaluation in a new setting is to build a thick local causal model.
So...

- Best way to get reliable prediction/evaluation in a new setting is to build a thick local causal model
- 3 kinds of middle-level theory can, deployed together, help you do so
- But you need those tools to do so
- This is NOT a good starting point
Figure 3: A systemic logical model for M4P enables better capture of M4P impact

(a) M4P intervention  \rightarrow  (b) Market change  \rightarrow  (c) Poverty reduction

Systemic

Sustainable  \leftrightarrow  Large scale
So...

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- This is NOT a good starting point
- Nor this
Liberal ideas ➔ Ideology ➔ No wars against democracies ➔ Constraints on govt. ➔ Democratic Peace

Liberal ideas ➔ Institutions ➔ Free debate ➔ Constraints on govt.
Better....
Causal Loop Diagram exploring systemic impact of efforts to improve social work through increased prescription of practice

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Increased prescription of practice

- O

Scope for dealing with variety of CYP needs with professional expertise

Sense of satisfaction, self-esteem and personal responsibility

- S

Staff absence or sickness rate

Staff turnover rate

- O

Time spent working with CYPs and families

Quality of social worker relationship with CYP and family

Increased prescription of practice especially ICS

- O

Average C&FSW caseload

Variety of needs of CYPs

Quality of outcomes for CYPs

- S

R1

R2
Responsible programme development: provide a ToC w these ingredients

1. The series of steps by which the intervention is to produce the outcome
2. The principles by which the effect is produced at each step
3. An account of, or a marker for, the kind of underlying structures that afford this sequence of changes
Thank you
Outcomes, not indicators

“Indicators are different from ... outcomes... indicators are specific, measurable targets related to the outcomes...”

NC: Because presence/absence of intermediate outcomes is stronger evidence of success than indicators of those

Shakman & Rodriguez