Using Mid Range Theory to Enhance Transferability of Study Findings

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Definition and rationale

Theory of change: How programme inputs and activities get converted to intended outputs and outcomes

A theory of change is drawn for a specific intervention

Mid Range Theory is stated at a sufficient general a level as to apply to a range of specific interventions in different settings

Allows systematic approach to assessing transferability. That is answering the question: will a study finding from one setting transfer to another setting?
Generalizability versus transferability

Generalizable finding is universal, applies always and everywhere (e.g., for practical purposes, gravity and vaccines)

Transferable finding applies in other settings, but not always and everywhere
MRT: An example of a mid-range causal principle

Providing people information about the benefits of a certain behaviour (or the harms of not adopting the behaviour) increases the likelihood of the behaviour being adopted.

Specific ToC would be applied to agricultural extension, road safety campaigns, anti-smoking etc.
What are the underlying assumptions?

Assumption 1  Behaviour not already adopted

Impact evaluation of agricultural extension in Kenya found no impact because farmers already using the practices being promoted
Underlying assumption 2

Possible to adopt the intervention

An impact evaluation of training farmers in irrigated agriculture found no impact... as the irrigation infrastructure had not yet been built
Underlying assumption 3

Beneficial to adopt the intervention

Study of productive activities proposed to SHGs in Andhra Pradesh found they were inherently loss-making
Underlying assumption 4

Communication is conducted in appropriate way and through appropriate channels/media

Systematic review of farmer field schools found that extension workers often don’t speak local language (around 2,000 languages spoken across Africa with over 400 in Nigeria alone)
And...

Do community workers speak the same language as the communities in which they are working?

Are female community workers available to work with female beneficiaries?

*These are the foundations for evidence-based guidance on designing community programmes*
Examples illustrate how specific evaluation findings link to general principles for transferability for relevant lessons for programme design.

- Farmers already practicing approaches being promoted.
- Are the behaviours being promoted largely absent in the target population?
- Productive activities proposed to SHGs inherently unprofitable.
- Do the benefits of participation for an intended beneficiary outweigh their transaction costs from participation?
- PS for programme designs: formative research on barriers to adoption is very useful here.
Formalizing the approach
From Cartwright et al. forthcoming CEDIL paper

1. Specify the overall programme theory
2. Produce a step-by-step diagram
3. Describe the causal principles at work at each step
4. Identify support factors
5. Identify derailers
6. Identify how to support supporters, and safeguard against the derailers
7. Allow for causal loops
8. Specify expected range of application
Step 1: The general programme theory for providing information to increase use of modern contraceptives

Providing people information about modern contraceptives and shortcomings of traditional methods increases the use of modern contraceptives
Step 2: Theory of change diagram

Information → Knowledge → Decision to use modern contraceptives → Acquire modern contraceptives → Sustained proper use → SRH outcomes
Step 3: Causal principles

• Providing information to people about modern contraceptives increases their knowledge about the benefits of modern contraceptives and how to acquire and use them
• Knowledge of the benefits and how to acquire leads to greater use of modern contraceptives
• Modern contraceptives are properly used
• Modern contraceptives work
Steps 4 and 5: Identify support factors and derailers

- Women in target group are not already using modern contraceptives
- Appropriate media and communications approaches exist for reaching the target group
- Women have the right to choose (which is a function of legislation and social norms)
- Contraceptives are available and accessible
- Contraceptives are properly used
Step 6: Supporting supporters and safe-guarding against derailers (programme design)

<table>
<thead>
<tr>
<th>Supporter/derailer</th>
<th>Programme design feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women have right to chose</td>
<td>Interventions to encourage progressive legislation and social norms</td>
</tr>
<tr>
<td>Appropriate media and communications approach</td>
<td>Formative testing of approaches aligned to target group norms and knowledge</td>
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<tr>
<td>Target group not using modern contraceptives</td>
<td>Adequate targeting mechanism</td>
</tr>
<tr>
<td>Contraceptives available and accessible</td>
<td>Ensure adequate supply through public and private channels</td>
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<tr>
<td>Contraceptives properly used</td>
<td>Communicate how to use not just what to use</td>
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## Using assumptions for evaluation questions

<table>
<thead>
<tr>
<th>Supporter/derailer</th>
<th>Programme design feature</th>
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</thead>
<tbody>
<tr>
<td>Women have right to chose</td>
<td>What are the barriers to women who want to use contraceptives doing so?</td>
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</tbody>
</table>
| Appropriate media and communications approach | Qualitative assessment of communication approaches  
Women’s knowledge of modern contraceptives (compared to comparison group) |
| Target group not using modern contraceptives | Baseline measure of contraceptive use |
| Contraceptives available and accessible | How can women procure contraceptives? What are the costs of doing so? |
| Contraceptives properly used | Measure how used (and knowledge on proper use), and how frequently used, not just if used |
## Using assumptions for indicators

<table>
<thead>
<tr>
<th>Supporter/derailer</th>
<th>Indicator</th>
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</thead>
<tbody>
<tr>
<td>Women have right to chose</td>
<td>Women’s agency, possibly using vignettes (moderator)</td>
</tr>
<tr>
<td>Appropriate media and communications approach</td>
<td>Women’s knowledge of modern contraceptives (compared to comparison group)</td>
</tr>
<tr>
<td></td>
<td>(link in causal chain)</td>
</tr>
<tr>
<td>Target group not using modern contraceptives</td>
<td>Baseline measure of contraceptive use (moderator)</td>
</tr>
<tr>
<td>Contraceptives available and accessible</td>
<td>Survey of health facility contraceptive availability (moderator)</td>
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<tr>
<td></td>
<td>Market survey of contraceptive availability and prices (moderator)</td>
</tr>
<tr>
<td>Contraceptives properly used</td>
<td>Knowledge on proper use (link in causal chain)</td>
</tr>
<tr>
<td></td>
<td>Frequency of use (link in causal chain)</td>
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Step 7: Feedback loops

- Word of mouth spillover effects
- Social norms get established through changed practice
- Better choices by women can be empowering leading to stronger rights
Step 8: Expected range of application

Settings in which knowledge of contraception is low

Social norms do not mitigate use of contraception and allow women to choose whether or not to use contraception

Contraceptives are available
What do we want CEDIL teams to do?

Systematic reviews

Systematic reviews

For ‘how is the intervention expected to work’ use a mid-range theory approach

Identify review questions across the causal chain (mixed methods review). Questions relate to causal processes and assumptions

Include relevant moderators and causal linkage indicators in your coding form

Present specific review findings. And in implications of review findings discuss transferable findings and applicable range of settings
What do we want CEDIL teams to do?

**Primary studies**

<table>
<thead>
<tr>
<th>Action</th>
<th>Task</th>
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<tbody>
<tr>
<td><strong>Embed</strong></td>
<td>Embed the programme theory of change in a mid-range theory approach</td>
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<tr>
<td><strong>Identify</strong></td>
<td>Explicitly identify causal linkages, supporters, derailers and supporters</td>
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<tr>
<td><strong>Address</strong></td>
<td>Address evaluation questions across the causal chain</td>
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<tr>
<td><strong>Include</strong></td>
<td>Include an explicit discussion of transferability of study findings drawing on the MRT approach</td>
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Follow up

- Cartwright et al. paper (forthcoming)
- Cedil MRT workshop November 2020
- Cedil paper comparing planned use of MRT in Cedil funded studies
- Cedil lesson-learning paper on use of MRT
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