What Works for Whom and under What Conditions?

Brief Intro on Realist Evaluation

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Panel 1:
Everything About Evaluation, but is Evaluating Everything?

Wednesday 20 October 2021

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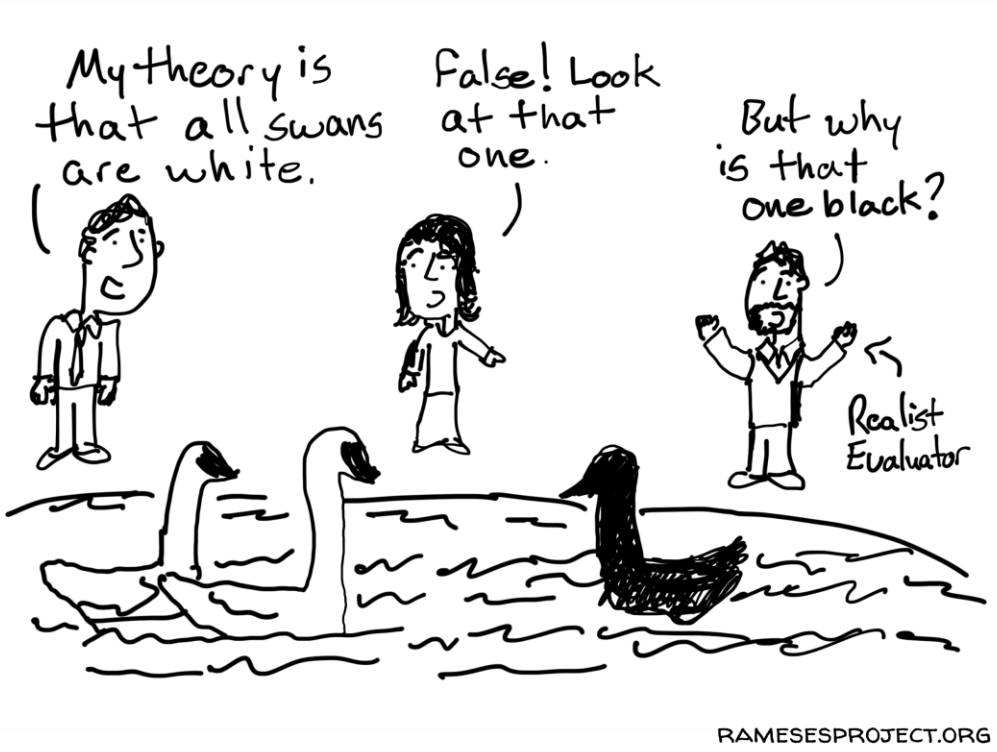
Contents

- What is Realist Evaluation?
- When (not) to use Realist Evaluation?
- What is needed to conduct Realist Evaluation?
- Examples of Realist Evaluation of non-profit programme in Singapore
- Take home messages

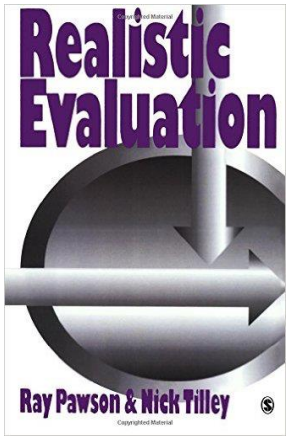
What is Realist Evaluation?

- RE is *not* a new method or a technical procedure
- RE is a logic of inquiry that attempts to answer the question: "what works, how, for whom, in what circumstances and to what extent?"
- Realist research is designed to improve the understanding of *how and why* interventions work or do not work *in particular contexts*



What is Realist Evaluation?

- RE is a member of the family of **theory—based** research approaches
- Theory-based research starts by clarifying the **'programme theory'** – that is, clarifying how programme activities are understood to cause (or contribute to) outcomes and impacts
- What distinguishes realist research from other forms of theory-based approaches are the **particular assumptions** that realist philosophy makes about the nature of reality, how causation works, and what these assumptions imply for study designs, methods, and utilisation



Traditional RCT and Realist Evaluation

	Traditional RCT	Realist Evaluation (realist RCT as part of MMR)
Aim	To identify whether an intervention works under ideal circumstances	To identify which complex intervention work for whom and under what circumstances (real life)
Design	Single-arm trial	Multiple trials, multi-arm trial, factorial trial, etc.
Data collection	Outcomes (quantitative data)	Context, mechanisms, outcomes and their interplay (quantitative and qualitative data)
Orientation of conclusions	Ascertain whether, all things being equal, an intervention is efficacious	Building and validating program theories

What is Realist Evaluation?

- **Development** of a realist program theory:

  "If we do 'x', 'y' will happen, because…." (CMO configurations)

- Definition of the **4** most basic research questions:
  1. For **whom** will the program theory work and not work, and **why**?
  2. In **what contexts** will the program theory work and not work, and why?
  3. What are the main **mechanisms** by which we expect the program theory to work?
  4. If the program theory works, **what outcomes** will we see?

- **Testing** of (initial) program theory (iterative process)

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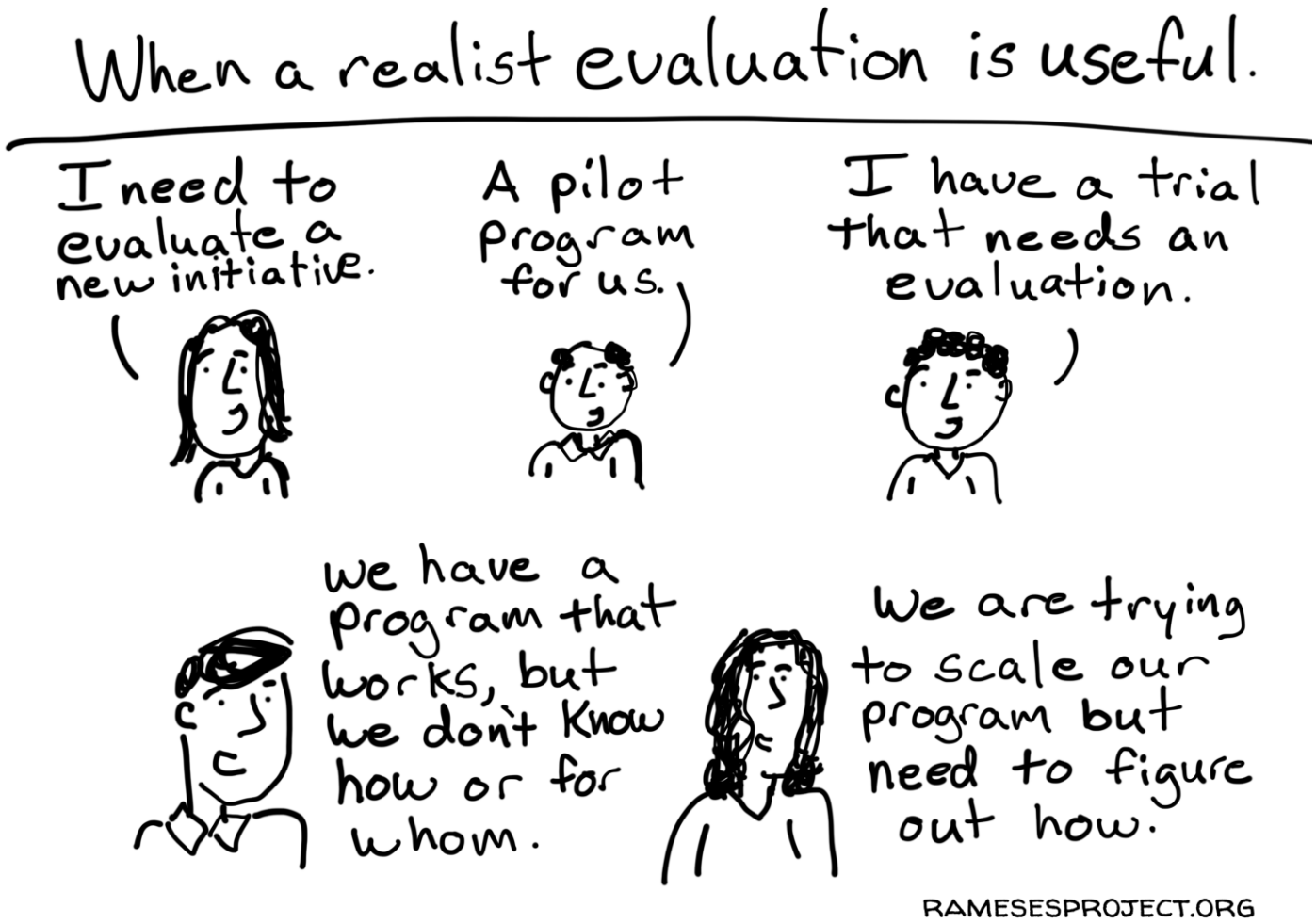
When to use Realist Evaluation



When not to use Realist Evaluation

- Realist evaluation is **not** appropriate when:
  - how, why and where programmes work is already well understood (a realist evaluation is not required as monitoring of implementation and outcomes should be sufficient);
  - there is no real interest in understanding how the programme works (development of programme theory and theory-based data collection are unlikely to be supported);
  - the only answer required from the evaluation is about the average nett effect of the intervention;
  - when programmes are genuinely simple and where one size really does fits all (the work involved in a realist evaluation is not warranted);
  - the human and financial resources required to undertake a realist evaluation are not available.

Westhorp, 2014

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What is needed to conduct Realist Evaluation?

- Helpful circumstances to conduct RE include:
  - policy and programme staff understand the role and value of programme theory;
  - longer term projects with concurrent evaluation;
  - implementation occurs at multiple sites or multiple groups;
  - adequate resources relative to programme size and complexity;
  - use of mixed methods evaluation (QUAL & QUAN);
  - evaluation team has exiting skills in realist evaluation.

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Example

Community for Successful Ageing
A Tsao Foundation Initiative

Integrated Care System

ComSA aims to create a sustainable integrated health and social care system that promotes health over the life continuum and enables ageing in place.

This is underpinned by robust care management and the person-centred medical home, whereby care is comprehensive, coordinated, accessible, and delivers on quality and safety. (See pcmh.ahrq.gov)

To reach its goal, ComSA takes a population-based systemic approach, engaging the collaboration of grassroots and civic organisations, health and social service providers, research analysts, policymakers and other stakeholders in Whampoa.

Key pieces in this plan are:

1. The development and implementation of a community risk screening tool which enables high risk elders to be identified for early intervention
2. A stratified care management service capable of supporting elders and their families with simple to complex needs
3. The person-centred medical home working in integration with care management to provide primary health and social care to elders with the most complex needs, as well as to their families
4. A para care manager system led by trained volunteers to support the work of the care managers
5. A coalition of service providers contributing to a seamless interface of service delivery across multi-sectoral interventions
6. Support for capacity building in eldercare skills and knowledge in Whampoa

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- **Study aims Phase I**: to build an initial programme theory (IPT) for the *development* of integrated care for elders and to examine the processes and experiences of stakeholders involved *in the development and imple*mentation of ComSA.

- **Study objectives Phase I:**
  1. To identify the contexts, mechanisms and outcomes as identified by individual stakeholders;
  2. To examine the relevance of the identified contexts, mechanisms and outcomes among internal and external stakeholders;
  3. To distil an initial programme theory for ComSA to enable informed decision making regarding further development and implementation.

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Methods Phase I:

- A realist evaluation design of processes of and experiences with ComSA was used, employing three streams of qualitative and quantitative data:
  - to identify the contexts, mechanisms and outcomes, 11 individuals were interviewed.
  - to examine the relevance of the identified contexts, mechanisms and outcomes 18 internal stakeholders and 6 external filled in a self-administered survey derived from the interviews;
  - to distil the initial programme theory for ComSA the preliminary findings were presented to the senior management team of the Tsao Foundation for their inputs
- Qualitative data were analysed in a stepwise approach.
- Survey data were analysed by taking into account the stakeholders' overall consensus on every statement (median) and the level of agreement reached.

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Results Phase 1:

- Out of the initial set of 27 context items, 17 mechanisms and 19 outcomes, a smaller set was derived that gained consensus among internal and external stakeholders.
- These sets were translated into 5 initial and related context-mechanism-outcome frameworks expressing:
  - clarity about aspects of ComSA;
  - resources to develop and implement ComSA;
  - accessibility to ComSA;
  - continuous evolvement of ComSA;
  - performance of ComSA.

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Results Phase 1:

- **IPT 1: If care providers and community leaders understand their (new) roles under ComSA and if they trust the (new) collaboration, integrated care will become more accessible for frail older people in Whampoa because care providers will be more involved in ComSA.**

- *'Trust'* and '*clarity'* are deemed relevant mechanisms for stakeholders to play their roles and take their responsibilities under ComSA.

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Study objectives Phase II:

- To collect and analyse data of qualitative and/or quantitative nature to **test** the first three initial CMO frameworks.

Methods Phase II:

- Rapid literature review;
- Collecting data among stakeholders*:
  - survey (closed and open questions) among stakeholders (n=50)
  - interviews with individual stakeholders (n=10-15)
  - focus group interviews with stakeholders (n=3 groups of 8-12)

    *older people and their carers, social care and health care professionals, managers, policy makers, others (selection in close collaboration with Tsao F).
- Sequential analysis of data: content-analysis, descriptive statistics, triangulation.

Example

- The **lack of understanding of how complex integrated care programmes achieve their outcomes** due to the lack of acceptable methods leads to difficulties in the development, implementation, adaptation and scaling up of similar interventions.
- In this study, an integrated care network (the National University Health System (NUHS) Regional Health System (RHS)) is evaluated, consisting of acute hospitals, step down care, primary care providers, social services and community partners using a theory-driven realist evaluation approach.
- This study aims to examine *how and for whom* the NUHS-RHS works to improve healthcare utilisations, outcomes, care experiences and reduce healthcare costs.
- By using a realist approach that balances the needs of context-specific evaluation with international comparability, this study carries the potential to address current research gaps.

Nurjono et al. 2018

Example

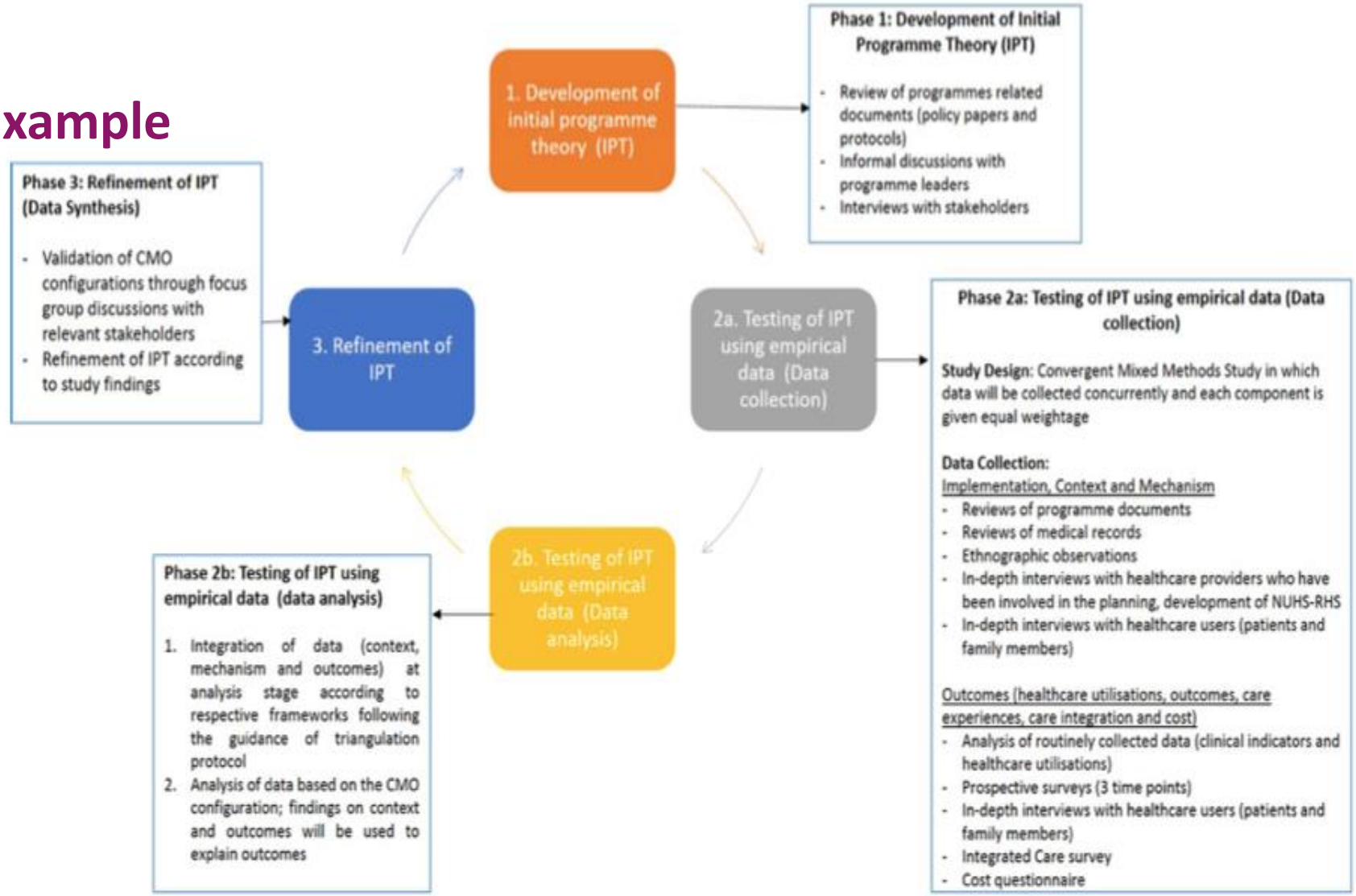

Figure 1 Realist evaluation processes and research phases according to Pawson an d Tilley. CMO, context, mechanism and outcome; NUHS-RHS, National University Hospital System-Regional Health System.

Nurjono et al. 2018

Example

BMJ Open

Retrospective evaluation of healthcare utilisation and mortality of two post-discharge care programmes in Singapore

Ian Yi Han Ang,[1] Chuen Seng Tan,[2,3] Milawaty Nurjono,[2] Xin Quan Tan,[1,4] Gerald Choon-Huat Koh,[2,3] Hubertus Johannes Maria Vrijhoef,[5,6,7] Shermin Tan,[8] Shu Ee Ng,[3,9] Sue-Anne Toh[1]

- To evaluate the impact on healthcare utilisation frequencies and charges, and mortality of a programme for frequent hospital utilisers and a programme for patients requiring high acute post-discharge care as part of an integrated healthcare model.
- Both programmes had no improvements in 1 year healthcare utilisation across various settings and metrics.
- Both programmes might be considered large multi-disciplinary interventions, but at their cores, the healthcare services provided as part of these interventions were still centralised within hospital-based teams.
- Singular intervention-based adjustments to the existing system hence might not be as impactful in effecting change without an overhauling transformation and restructuring of the public hospitals and healthcare system.

Ang et al. 2019

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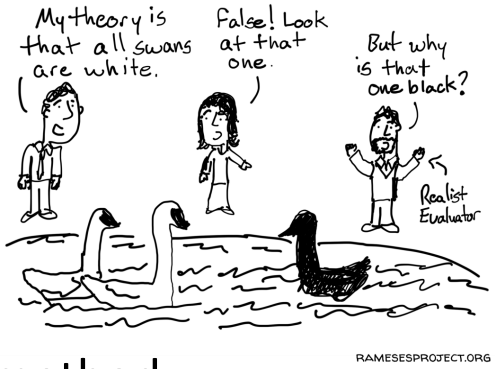
Take Home Messages



- Realist Evaluation is a logic of inquiry, it is not a new method

- Realist Evaluation is **theory-based research** and starts by clarifying a 'programme theory' – that is, clarifying how programme activities are understood to cause (or contribute to) outcomes and impacts. It searches for causal explanation by using the idea of mechanisms that are at work: "If we do 'x', 'y' will happen, because…." (CMO configurations).

- Realist Evaluation has the potential to **better support decision making regarding the selection, design, implementation and funding of complex programs.**

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