



**An Introduction to
Realist Reviews
SOPHIE Newsletter May 2013**

About us

The SOPHIE research team from Canada is based at the Centre for Research on Inner City Health in Toronto. We have conducted a few realist reviews in the past and, under SOPHIE Work Package 2, we are in the process of conducting a realist review on macro-political influences on unemployment insurance policies, and, the impact(s) of unemployment insurance policies on poverty and health. We draw from those experiences when describing realist reviews here.

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Overview

In this Methods Corner presentation we cover the following topics

- What is a realist review?
- When to do a realist review? A comparison of systematic review approaches
- The “critical ingredients” of a realist review:
 - MRT
 - Demi-regularities
 - CMOs
- Our experience doing a realist review: Insight

What is a realist review?

“What works, for whom, in what circumstances . . . and why”
(Pawson, 2012, p.178).

Realist reviews are a relatively new approach to synthesizing research that seeks an explanatory focus. At its core, realist reviews unpack the mechanism(s) of how and why complex interventions thrive or fail, in particular setting(s) (Pawson, 2005).

When to do a realist review?



Realist review is a new method of systematic review, designed for complex policy interventions (Pawson, 2005).

In systematic reviews, the basic evaluative question is: ‘*what works?*’, whereas in realist reviews, the question changes to: “*what is it about this programme that works, for whom, and in what circumstances?*” (Pawson, 2005, p.22).

For example, clinical treatments are often conceptually simple and evaluated in randomized controlled trials (RCTs), making systematic reviews an appropriate method, on the other hand, literature on health policy interventions are more complex and methodologically diverse, making it highly suited to realist reviews (Pawson, 2005).

Comparison of systematic reviews approaches

	REALIST REVIEW	SYSTEMATIC REVIEW
Type of Intervention	Complex	Simple; discrete
Aim / Focus	EXPLANATORY - how 'x' works, in what contexts, for whom	JUDGEMENTAL – how much does x,y, z improve health
Rigor	Very Rigorous	Very Rigorous
Relevant Types of Evidence	Includes a wide range of research and non research (i.e., both quantitative and qualitative)	RCTs ideal. Mostly quantitative research on effectiveness (e.g., controlled & uncontrolled before & after studies, interrupted time series..)
Evidence Source	Peer reviewed journal literature, policy reviews, stakeholder analysis, focus groups, gray literature (reports, conference proceedings).	Peer reviewed literature (finite set of data)
Method	Theory-driven synthesis: deconstructs intervention into component theories. Context data retained, basic theory is refined concerning applicability in context.	Statistical synthesis/Meta-analysis: data from individual studies are combined statistically and then summarized
Usefulness	How to make an intervention most useful	Demonstrates which intervention has largest or smallest effect

The “critical ingredients” of a realist review



1. Middle-range theory (MRT)
2. Demi-regularities
3. Context(s) , mechanism(s) and outcome(s)
(known as CMO configurations)

Critical ingredient: MRT

Middle Range Theories (MRT) are abstract enough to provide generalizability, but also close enough to observed data that it permits empirical testing

(Merton, 1967 cited in Jagosh, 2011).

Critical Ingredient: MRT continued...

Identifying initial MRTs

- Identifying initial MRTs is a repetitive and speculative process.
- Use a variety of sources, for instance, brain-storm, scoping review, consult with experts, and even use past experience is used to develop ‘educated guess’ theories, by asking: *Why do certain outcomes occur?*
- For your RR you will should a list of potential *initial* MRTs to inform your evidence search in your RR (Wong, 2010).

Critical Ingredient: MRT continued...

Testing and refining initial MRTs

- Initial MRTs are not definitive until they have been tested
- Continually validate your initial MRTs by asking:
Does the data affirm or refute the MRTs?
Are there patterns/demi-regularities in the data?
- “Much of the work in realist review involves not only repeatedly questioning the validity of any candidate theory and refining it BUT also seeking out new candidate theories from included studies if existing ones are found wanting” (Wong, 2010, p.2).

Critical ingredient: Demi-regularities

Demi-regularities are semi-predictable, re-occurring patterns in the data
(Pawson, 2006).

Critical ingredient: CMOs

For our realist review, we seek to uncover how, why and under what circumstance(s) do unemployment insurance policies impact(s) poverty rates and/or health outcome(s). Based on our scoping review and expert interviews, we identified the following preliminary CMOs:

- Contexts (C): political institutions, welfare state regime, labour unions
- Mechanisms (M): duration, eligibility or replacement rate of unemployment insurance
- Outcomes (O): exacerbate, maintain or improve poverty rates and health outcomes

A CMO example:

Generous welfare state regimes (C) that provide high unemployment insurance replacement rates (M) alleviate stress and maintain health/well-being (O) among the unemployed.

Our experience doing a realist review: Insight



- Keep in mind that a realist approach is truly an iterative process; continuously refining MRTs.
- Familiarizing yourself with the publication standards for RR is highly recommended (see reference list).
- Hand-checking references and “snowball” techniques are acceptable methods of retrieving articles.
- Based on the data retrieved (e.g. literatures search, expert interviews, etc.), the direction of your realist review may shift or expand in scope, this is all a part of the realist process.
- Mechanisms are hard to find in peer-review literature, often articles are ‘thin’ on such evidence
- For synthesizing your evidence, having a multi-disciplinary team involved in the synthesis is one key for success.
- Strong qualitative analytic experience is an asset

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