A brief introduction to realist evaluation

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Introduction

This is a brief introduction to some of the key concepts and processes in Realist Evaluation for people who have a working knowledge of research methodology. It is one of several Theory-Based methods that can be used for process or outcome evaluation It will hopefully stimulate interest and further reading in the subject.

What is realist evaluation?

Realist methodology is based on the assumption that the same intervention will not work everywhere and for everyone. The focus is on "what works, for whom, under what circumstances and how" (1). The key questions in realist evaluation concern causation (the act of causing something) and attribution (the act of attributing something). The term 'realist evaluation' was first used by Pawson and Tilley in their book (2).

Underlying philosophy

All evaluation methodologies are based on philosophical assumptions. Realist Evaluation is based on realism (a philosophical perspective in which the social world is viewed as real). Therefore, non-observable entities and processes such as culture, class and economic systems can have a real effect on whether programmes work. Social systems such as the family, schools and economic systems have dynamic boundaries in terms of the flow of people, resources and information. These social systems interact with each other, so system boundaries will need to be defined for the evaluation even though these boundaries do not necessarily exist in reality. Programmes themselves are open and dynamic systems. These can interact with other social systems, and so causation is not a simple linear process. They can be the result of changes in, and interactions between, different social systems.

When is it appropriate to use a realist approach?

Realist approaches are appropriate for evaluating complex interventions such as community based public health programmes with wider learning potential. They are particularly useful for evaluating programmes that produce mixed outcomes to better understand how and why differential outcomes occur. It is not appropriate when how, why and where programmes work is already understood, the programme is simple, one-size-fits-all, or only the net effect of the intervention is of interest.

Programme Theory

Programme theories identify how programme activities cause outcomes. The purpose of a realist evaluation is to test and refine the programme theory rather than determining outcomes in particular contexts. Assumptions to develop programme theories may be inspired by a variety of sources such as published evidence, case studies and formal theories from specific fields such as educational or economic theories.

Context, mechanisms and outcomes

The 3 key concepts in realist evaluation are context, mechanisms and outcomes. The evaluator develops a Context-Mechanism-Outcome (CMO) hypotheses, that is, a hypothesis about which mechanisms are likely to operate in different contexts and the outcomes that will be observed when they do.

Context

The context determines whether mechanisms works during a programme. For example, outcomes may vary depending on economic, geographic, historical, social and political circumstances and the cultural values of participants. Variations within the programme's target group (for whom) can also influence which mechanisms may operate. A Realist Evaluation hypothesises which components of context will affect how, and for whom, a programme will work and data is collected about those components.

Mechanisms

Mechanism can be defined as "…underlying entities, processes, or structures which operate in particular contexts to generate outcomes of interest."(3). Because mechanisms need the right context to work, any changes in the system can affect the causal process. In social interventions, the mechanisms is the cognitive or emotional reasoning of members of the target group responding to the resource, opportunity or constraint provided by the programme (2).

Outcomes

The outcomes of a programme can be intended or unintended and can be short, medium and long-term. There can also be multiple outcomes with varying importance for different stakeholders.

> 'In summary, realism holds that mechanisms matter because they generate outcomes, and that context matters because it changes... the processes by which

an intervention produces an outcome. Both context and mechanism must therefore be systematically researched along with intervention and outcome. By implication, research or evaluation designs that strip away or 'control for' context with a view to exposing the 'pure' effect of the intervention limit our ability to understand how, when and for whom the intervention will be effective.' (4)

Carrying out realist evaluation

Clarifying the aims

The aims of a Realist Evaluation are determined by the purposes for which the evaluation will be used, that is, the policy and practice issues that need addressing. For example, is the aim to increase the number of target groups for which the programme is effective, adapting the programme for roll out in other settings or increasing the range of effective programmes within a particular field? Evaluation questions can be refined and prioritised to reflect the purposes for which the evaluation will be used and also what is already known about the programme.

Developing programme theories

In Realist Evaluation, programme theories are configured as 'context-mechanism-outcome' (CMO) hypotheses. This is followed by a process called retroduction (a form of logical inference using abductive reasoning to identify the most likely explanations for an incomplete set of observational data).

For the purpose of the evaluation, hypotheses can be developed by asking 4 basic questions (5):

1. For whom will this basic programme theory work and not work, and why?
2. In what contexts will this programme theory work and not work, and why?
3. What are the main mechanisms by which we expect this programme theory to work?
4. If this programme theory works, what outcomes will we see?

Because different mechanisms will be triggered in different contexts, leading to different outcomes, linked sets of hypotheses are likely to be generated. These can be recorded on a chart listing the different CMO. These charts are not simply lists of contexts, mechanisms and outcomes, but rather each row describes the outcome generated by a specific mechanism in a specific context.

Data collection

Data collection methods are chosen that allow the programme theory to be tested. It is important that the data can be disaggregated for the different contexts, mechanisms and groups identified in the programme theory and that this data can be linked for analysis, which is easier with quantitative data. However, qualitative data can also be used if this can be disaggregated, particularly for the different groups.

Data analysis

Realist analysis uses both quantitative and qualitative data to test and refine different aspects of the programme theory. This will lead to a better understanding of contextual factors that determine which and whether mechanisms operate, what the mechanisms are and how they work, and the different outcomes achieved from the interaction between different contexts and mechanisms.

Reporting the results

This should include a description of the programme theory and CMO hypotheses and an explanation of what data is being used to test the different components of the programme theory. The disaggregated outcomes for the different groups should be presented, along with the evidence on the different context and mechanisms, to explain how and why the differential outcomes exist. Finally, a refined programme theory should be presented, along with its policy and practice implications, linking back directly to the purposes for which the evaluation is being used. For further information see Greenhalgh et al (6).

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