



Evaluation Good Practice: is good enough better than perfect?

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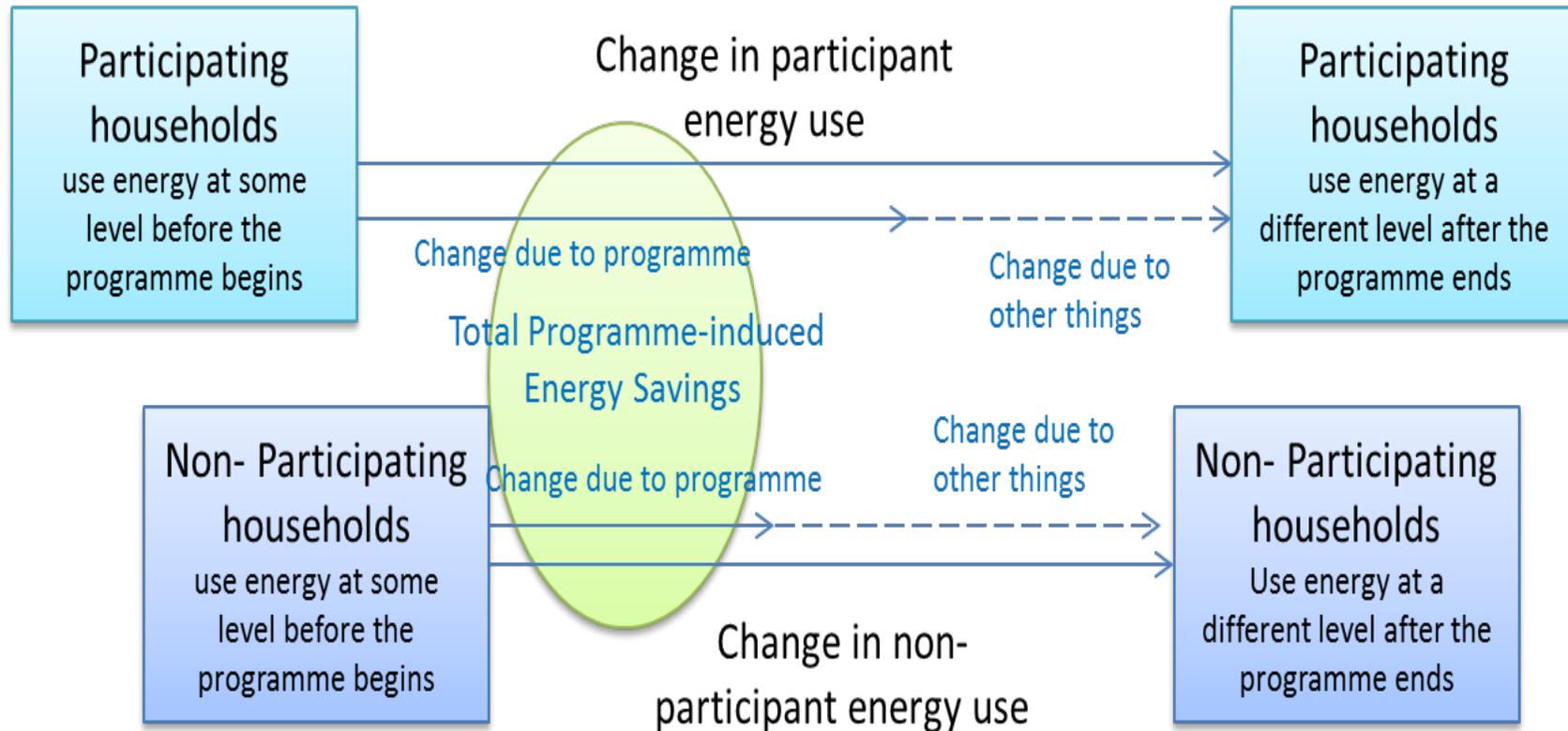
Nick Eyre

eceee summer study
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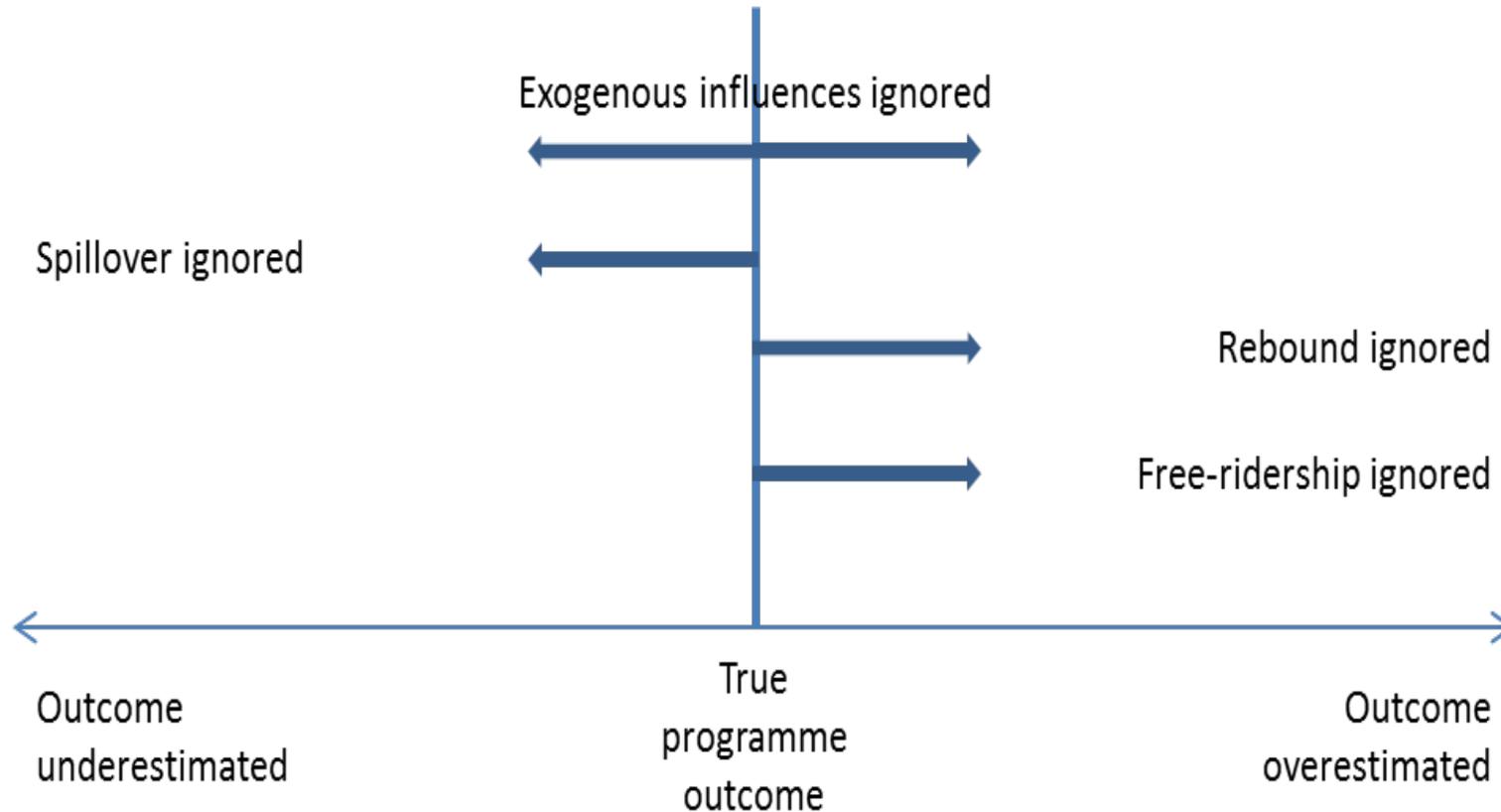
Methodology

1. Expert advisory group
2. Review literature on good practice evaluation
3. Search key databases and conferences for literature on evaluation
4. Review literature and select key evidence
5. Use this to answer the question!

The evaluation problem



Getting it right – in theory



Evaluation in practice

Constraints for evaluators

- Evaluation aims
- Data issues
- Control of programme implementation
- Time available

Results: comparing methods

Simple engineering Enhanced engineering Before - after Cross-section Difference in differences Exact matching Experiment (RCT)



Accuracy....

But also

- Data requirements
- Cost
- Time necessary to complete

Results: practical use of methods

- RCT: most accurate
 - *Rarely used, but some recent examples (OPower schemes)*
 - *Do work for well defined single interventions on clearly defined population*
- Engineering estimate: least accurate.....
 - *BUT very widely used (utility obligation programmes)*
 - *And may well be 'good enough', especially for large programmes*
- Quasi-experimental approaches
 - *in between the two*
 - *each with strengths and weaknesses*
 - *Increasing use as new datasets emerge*

What we know

- Building codes
 - Appliance policy
 - Utility programmes
-
- Reduce energy use; savings of ~10%
 - *But* participant energy use reduction less than calculated
-
- Feedback programmes
 - 1–5% reduction in electricity use
 - *But* large variation between households

What we don't know

- Outcomes of:
 - information / advice (except feedback);
 - community-led programmes;
 - innovative finance
- 'Reach' of different types of programme
- Wider economic impacts

Closing the gaps: individual programmes

- Difference between estimates and actual (building codes; utility programmes)
 - Grey literature / top down approaches
- Variability of outcomes for billing feedback
 - Small scale experiments / longitudinal surveys
- Is it too late for experiments on innovative finance?
 - In most cases / use macro approaches
- How do we separate advice from other programme elements?
 - Theory-based hypothesis testing

Closing the gaps: wider impacts

- Indirect rebound vs non participant spill over
 - Neither addressed by 'usual' methods
 - Test alternative hypotheses using large datasets and expert opinion

Conclusion

A good enough answer to the right question is better than a perfect answer to the wrong question

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full report to be published soon :

<http://www.ukerc.ac.uk/programmes/technology-and-policy-assessment/energy-efficiency-evaluation.html>

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