



Innovation
Growth Lab

Challenges with outcomes and
indicators in RCTs

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Nesta...

Topics

- IGL overview
- What's so special about RCTs?
- Outcomes and indicators
- IGL Trials Database
- Key challenges



Innovation Growth Lab

The new global laboratory for innovation and growth policy

Use randomised trials to build the evidence base on the most effective approaches to



Increase innovation



Support high-growth entrepreneurship



Accelerate business growth

What is IGL?

- A new global collaboration that develops and tests different approaches to support innovation, entrepreneurship and growth, bringing together researchers and private and public organisations

Our aims:

- Improve the evidence base on the effectiveness of interventions
- Encourage experimentation with new interventions
- Push forward the knowledge frontier

What we do:

- Run trials with partners
- Fund trials with IGL Grants
- Build and connect communities
- Promote wider adoption of trials
- Create useful resources
- Disseminate lessons

To get it touch:

Contact us if you would like to find out more or become a partner
(innovationgrowthlab@nesta.org.uk)

See more and learn about the different ways we can work together at www.innovationgrowthlab.org

Partners

Nesta...

Ewing Marion
KAUFFMAN
Foundation



ACCIÓ
Generalitat
de Catalunya



Australian Government
Department of Industry



Department
for Business
Innovation & Skills




DANISH BUSINESS AUTHORITY



Ministry of Economic Affairs
Government of the Netherlands


HIE
Highlands and Islands Enterprise
Iomairt na Gàidhealtachd 's nan Eilean

Innovate UK
Technology Strategy Board

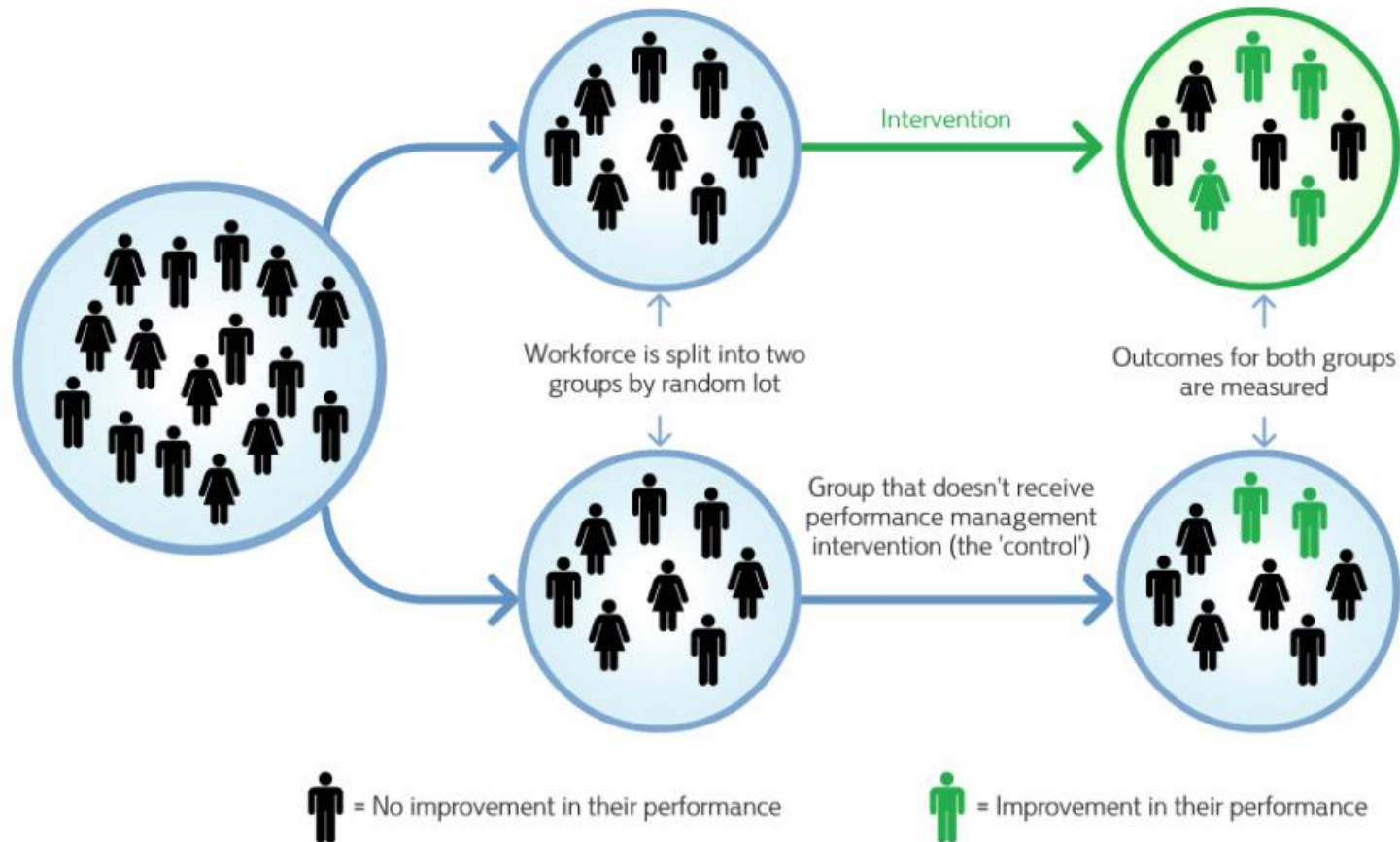
PARP 

TeKes



On-going discussions with several other organisations

What's so special about RCTs?



Effect estimate = $O_1 - O_2$ (Counterfactual is O_2)

Planning for data collection

- What data to collect? (i.e. what are your outcomes?)
- What indicators and instruments to use?
- When should be outcomes measured?
- Where should be outcomes measured?
- How frequently should be outcomes measured?

	Outcome	Indicator	Instrument
Definition	A change or impact caused by the programme we're evaluating	An observable signal used to measure outcomes	The tool we use to measure indicators
Example (Shamdasani, Kaur & Breza, ongoing)	Increase in employee productivity	The number of total items produced in a day	Administrative data (business records)

Outcomes and indicators

- Using a theory of change (ToC) to specify outcomes and indicators
- Specifying outcomes and indicators from the literature
- Primary *versus* secondary outcome(s)
- Indicators require a strong logical link connecting it to the relevant outcome
- This logic also has to be valid for the context

Identified challenges

- Specification of research questions and outcomes
- A myriad of outcomes and indicators (implications for the study design, e.g. sample size)
- Choosing 'hard' indicators (e.g. turnover rate, number of jobs, level of firm R&D investment) and composite indicators (e.g. Technology Achievement Index)
- Pre-specified analysis plan (incl. adjustments for multiple testing)
- Doing it all before trial commences

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