What makes experimental designs different to other research?

Peter John

Research in local government – surveying the scene

- Research arms popular in the 1970s and 1980s, part of strategic/intelligence approach
- But closure/merger of research departments since 1980s
- Much current research tied to detailed programme evaluation, ticking boxes
- Less scope for broader research on what works
- National evaluation programmes don’t drill down into what works locally
- Need to create more locally-based research – potential through NWIN/CfLG

What do we need research for?

- Key problem for public agencies is knowing whether what they do has the intended effect? What works?
- Observation is not proof of what works, but a lot of decision-making is based on perception, anecdotal evidence
- Often local government is doing so many things at once it is impossible to sort out what causes what
- Hard to pick out programme/Hawthorne effects, e.g. from pilot programme

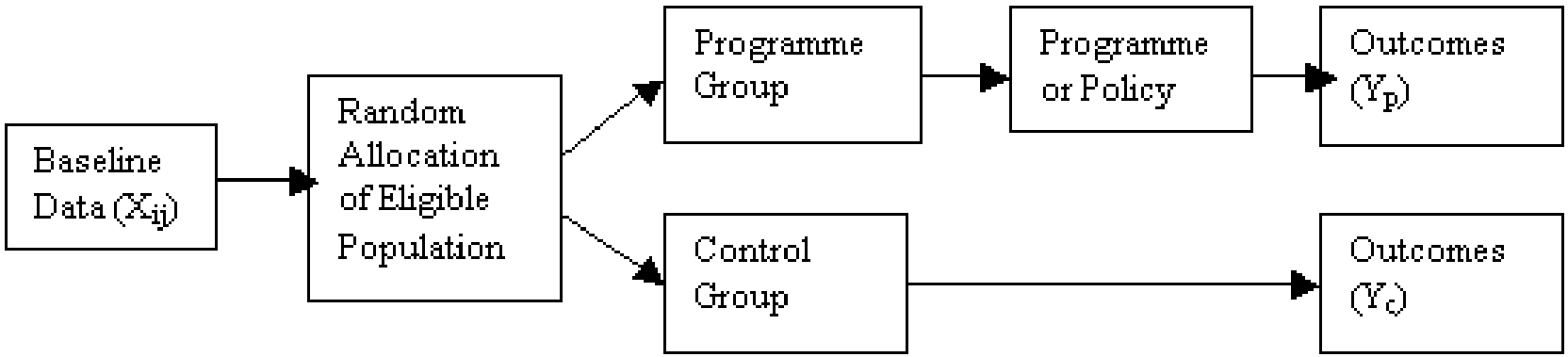
Some conventional research techniques

- Surveys - very static, selection issues, validity
- Before and after studies - hard to pin down what worked; would it have worked without the intervention?
- Case studies – hard to generalise, does not provide robust information, not proper controls
- Using official statistics – again hard to pick out effects from what would have happened anyway

Experimental studies

- Long tradition in science of experimental work: randomised control trials (RCTs)
- Basic idea is that you randomly allocate who gets the treatment so that you know that if there is an effect that is solely due to the intervention not some other factor
- Importance of the control group
- Less applied in social sciences, but recent interest in economics and social policy - seen as the gold standard – see Cabinet Office, *Magenta Book: Guidance Notes on Policy Evaluation* (2000)

Simple Random Allocation Design



Experiments and behaviour change

- To change behaviour you need an intervention – e.g. mentoring, prevention, enforcement – RCTs ideal
- You need to allocate interventions randomly - sometimes easy (e.g. littering); other times hard (e.g. binge drinking)
- You need to monitor behaviour

Behaviour change: voting

- IPEG voter turnout project
- 2005 General Election sampled 6000 voters in Wynthenshawe
- Randomised into three groups: telephoned, canvassed and control
- Compare voter turnout after the election
- 7 per cent increase in the vote
- No other explanation than the intervention
- Effects in 2006 local elections a year later – long lasting

Challenges of RCTs

- Resistance to the idea that some people get something, others not
- Hard to leave control group alone
- Very hard to measure impacts, e.g. surveys, measures of behaviour
- Need for a large sample size
- What level of intervention – individual or community or both?

Design experiments

- *An intensive form of research on innovations in the public sector. Design experiments rely on a close collaboration between researchers and practitioners, who both implement the intervention and observe it.*
- *The method originally derives from the design sciences, such as aeronautics and artificial intelligence, where designers use the information about the implementation of an intervention to help re-specify and re-calibrate it until it works.*

Design experiments continued

- Experimental element comes from intervention and monitoring it
- Use of non-randomised control group
- Not quite a powerful as a RCT, harder to point the causal arrow
- Flexible, allows for responsiveness
- Suited to when numbers are low
- Could lead to a RCT in the future

Where to go?

- Behaviour change top of government agenda, seen as better than top down regulation/control of the effects of poor citizen actions or remedying those effects
- Hard to achieve – needs non-conventional approaches – need to appeal to core values
- Experiments can validate whether interventions work
- Few RCTs/design experiments in local government
- The North West is the pioneer, national leader