

NCSC 2007

“Evaluating the impact of community safety”

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Recent Headlines: “Drugs education is not working”

“ having reviewed research from across the world, a committee of doctors and scientists on the ACMD concluded that the success of school-based schemes was "slight or non-existent" and could even be "**counter-productive**".*

* Advisory Council on the Misuse of Drugs (ACMD)

Why Are We All Here?

- We share the goal of improving well being for society and individuals
- Interventions which we support as a society should benefit individuals and society and should not cause harm
- We want to know how to evaluate what works, how it works and whether it is worth it.

Workshop Outline

- **Introduction**
- **Group Exercise 1: Case Studies**
- **Group Exercise 2: Options**
- **Group Exercise 3: Fit for Purpose**
- **Consolidation: Discussion Session**



About Matrix

- **Brand:** We lead the way in providing high-value, evidence-informed advice
- **Sectors:** Our public sector clients are involved in health, crime reduction, criminal / civil justice, social care, substance misuse, housing, children and young people's services and sustainable communities sectors
- **Core Skills:** We specialise in economics, analysis, research and business strategy, and informatics

About Me

- CEO and co-founder of Matrix
- Economist
- Member of the Campbell Crime and Justice Group
- Member of the Cochrane Campbell Economics Methods Group
- Advocate of improving the use of evidence to inform decisions

About You?

- Politicians?
- Policy advisers?
- Civil Servants?
- Practitioners?
- Researchers?
- Economists.....?

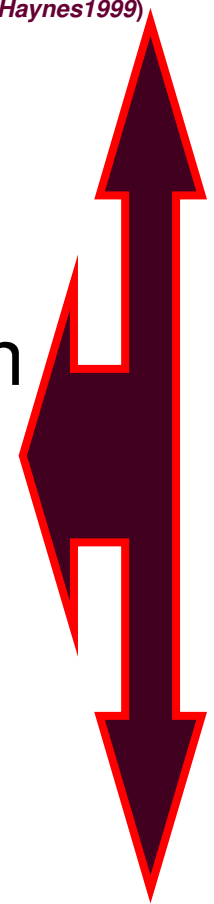
Important evaluation questions (adapted:Haynes1999)

• Should it work? → Theory

• Can it work? → Implementation

• **Does it work?** → **Impact**

• Is it worth it? → Value



Source of interventions

- Historical practice (“we have always done it this way”)
- Taught practice (“we teach people to do it this way”)
- Innovative practice (“I try new ideas”)
- Research (“I examine the theories”)

→ the popular vote.....

The role of synthesis

- What do we already know about:
 - Theory
 - Implementation
 - Impact
 - Value?
- How do we find out?
 - Systematic review
 - Rapid evidence assessment
 - Lit reviews
 - Expert panels

Big questions

- Risks of using existing research: how do we judge whether research is credible?
- Where secondary research is limited, how do we evaluate existing or innovative practice with confidence?

Evaluation challenges

1. **Internal validity:** can we attribute effect to intervention?
2. **Statistical power:** can we measure the effect with confidence?
3. **External validity:** can we generalise the results?

Evaluating new medical interventions

- Idea
- Basic science
- Laboratory trials
- **Clinical trials**
- Licence
- Approval (e.g. NICE)

→ Average 10-15 years?

Arguments for RCTs

- Interventions can do harm
- If undertaken well → experiments minimize risk of bias in measuring impact
- Basic hypothesis: “can we identify an effect with confidence?”
- If results insignificant then:
 - There isn’t an effect; or
 - There is an effect but we haven’t detected it with confidence.

Arguments against RCTs

- **Epistemology:** “the world doesn’t work like this”
- **Analytical:** “there are too many analytical constraints”
- **Ethical:** “you can’t deny someone an intervention”
- **Legal:** “you might be challenged if you deny treatments”
- **Logistical:** “there are too many practical constraints
- **Cost:** experiments can be expensive

Maryland Scale

Scale	Impact evaluation methodology
5	Random control trial: Random assignment and analysis of comparable units to program and comparison groups
4	Matched pairs: A comparison between multiple units with and without the intervention; or using comparison units that evidence only minor differences
3	Multivariate model: A comparison between two or more compatible units of analysis, one with and one without the intervention, where there are differences in the relevant characteristics of the units.
2	Before/after or time series analysis: Temporal sequence between the intervention and the measure.
1	Correlation: Correlation between an intervention and a measure at a single point in time.

Sherman L, Farrington D, Welsh B and Mackenzie D 2002. *Evidence-Based Crime Prevention*. Routledge, London and New York

“Scared Straight”

“Results of this review indicate that not only does it fail to deter crime but it actually leads to more offending behaviour. Government officials permitting this program need to adopt rigorous evaluation to ensure that they are not causing more harm to the very citizens they pledge to Protect”

Petrosino et al (2003) Scared straight' and other juvenile awareness Programs for preventing juvenile delinquency, Campbell Collaboration

“Boot Camps”

Should boot camps be abolished? Although this review questions the effectiveness of boot camps as a correctional practice, the evidence also suggests that they are no worse than the alternatives examined in these studies (e.g., jail and prison time).

Wilson et al (2007) Effects of Correctional Boot Camps on offending. Campbell Collaboration

And something that works.....

Our results show that problem-oriented and community-wide policing approaches are more effective at reducing drug calls for service and drug incidents than law enforcement approaches that target drug hotspots.

Mazerolle et al (2007) Street-level drug law enforcement: a meta-analytic review, Campbell Collaboration

Evaluation Methods?

Group Exercise 1: Case Study



Evaluation Methods?

Group Exercise 2: Options



Evaluation Methods?

Group Exercise 3: Fit for Purpose



Evaluation: what does good look like?

Consolidation Discussion



Important Links

- <http://www.campbellcollaboration.org/>
- <http://www.campbellcollaboration.org/CCJG/index.asp>
- <http://www.evaluation.org.uk/>
- http://www.gsr.gov.uk/professional_guidance/magenta_book/index.asp