

Advanced Crime Prevention Concepts – Evaluation and Evidence-Based Practice

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Introduction

Evaluating crime prevention initiatives is critical to determining if particular forms of intervention are effective. Despite the importance of evaluation, one Australian study found that “...fewer than 10% of 170 state and territory crime prevention programs and projects identified had been evaluated”.ⁱ There are numerous reasons why evaluations are not conducted more often. Some of these reasons include:

- The limited availability of funding and resources for evaluations
- Concerns that an evaluation will highlight deficiencies which might result in funding being withdrawn
- The limited availability of expertise to undertake an evaluation, especially of complex programs. As Tilley (2009) demonstrates with the following, evaluations can be complex undertakings:
 - “It is technically very tricky both in relation to specific initiatives and in relation to the sorts of partnership approach that are now widely promoted... Evaluation results should allow us more effectively and efficiently to lessen crime and its effects, and we need to measure outcomes in these terms. A number of tricky technical challenges confront the measurement of outcome effectiveness. These include, for example, discounting regression-to-the-mean effects, establishing a secure counterfactual, attributing responsibility for observed changes to the measures introduced, identifying active ingredients in packages of measures, identifying short and long-term effects, identifying significant side-effects, and attaching figures to costs and benefits of interventions”ⁱⁱ

Given the increased calls for evidence-based policies and practice, it is clear that much greater attention will have to be given to evaluating crime prevention interventions and initiatives – without rigorous and methodologically sound evaluations, it will not be possible to develop an evidence base.

Campbell Collaboration

In an attempt to develop an evidence base for crime prevention, a number of experimental criminologists helped establish the Campbell Collaboration. The Campbell Collaboration is a clearinghouse of research from across the world. By providing access to the latest research findings, it is hoped that policy makers and politicians will base their programs and policies on sound evidence. Information from the Campbell Collaboration can be found at – <http://www.campbellcollaboration.org/>.

While this movement to developing an evidence-base is applauded, it is worth considering some of the challenges of such an endeavour. Firstly, how does the Campbell Collaboration synthesise all of the research on a particular topic? Secondly, given that studies of the same intervention in different locations will frequently adopt different methodologies, and therefore produce superior and inferior evaluations, how does the Campbell Collaboration grapple with this issue?

Systematic Review

A systematic review is undertaken to synthesise available research findings on a particular topic or issue. According to the Campbell Collaboration, “the purpose of a systematic review is to sum up the best available research on a specific question. This is done by synthesizing the results of several studies. A systematic review uses transparent procedures to find, evaluate and synthesize the results of relevant research. Procedures are explicitly defined in advance, in order to ensure that the exercise is transparent and can be replicated. This practice is also designed to minimize bias. Studies included in a review are screened for quality, so that the findings of a large number of studies can be combined. Peer review is a key part of the process; qualified independent researchers control the author’s methods and results. A systematic review must have:

- Clear inclusion/ exclusion criteria
- An explicit search strategy
- Systematic coding and analysis of included studies
- Meta-analysis (where possible)”

(http://www.campbellcollaboration.org/what_is_a_systematic_review/index.php)

Maryland Scientific Methods Scale

The Maryland Scientific Methods Scale is the method used to categorise research and evaluations according to the methodological strengths and weaknesses. By adopting this approach, it is possible to exclude weak evaluations from systematic reviews in a consistent manner. The Scale covers the following levels:

Level 1: Correlation between a prevention program and a measure of crime at one point in time (e.g. areas with CCTV have lower crime rates than areas without CCTV)

Level 2: Measures of crime before and after the program, with no comparable control condition (e.g. crime decreased after CCTV was installed in an area)

Level 3: Measures of crime before and after the program in experimental and comparable control conditions (e.g. crime decreased after CCTV was installed in an experimental area, but there was no decrease in crime in a comparable control area)

Level 4: Measures of crime before and after the program in multiple experimental and control units, controlling for other variables that influence crime (e.g. victimisation of premises under CCTV surveillance decreased compared to victimisation of control premises, after controlling for features of premises that influenced their victimisation)

Level 5: Random assignment of program and control conditions to units (e.g. victimisation of premises randomly assigned to have CCTV surveillance decreased compared to victimisation of control premises).ⁱⁱⁱ

Exercise

1. What are some of the limitations of systematic reviews and the Maryland Scientific Methods Scale?

2. Despite these limitations, how might the Maryland Scientific Methods Scale be used to inform attempts to evaluate preventive programs in Australia?

Five Practical Tips when Commissioning an Evaluation^{iv}

The following tips are provided if you are commissioning an evaluation:

1. Get the evaluator in early
2. Think about how the evaluator might measure your program outcomes
3. Find out whether information on your outcomes is being routinely recorded
4. Think about how a control group might be constructed
5. Appoint a program implementation manager

These tips are obviously useful where an external evaluation is being commissioned and it is argued they have some relevance even when an internal evaluation is being undertaken. Considering evaluation early; thinking about how program outcomes will be measured and establishing if relevant data is routinely collected; considering a control group (or area) and appointing an implementation manager, are all equally valid considerations for an evaluation managed internally.

ⁱEnglish, B.J.; Cummings, R. and Straton, R. G. (2002) ‘Choosing an Evaluation Method for Community Crime Prevention Programs’, in Tilley, N. (ed.) **Evaluation for Crime Prevention**, Crime Prevention Studies, Vol. 14, Willan Publishing, Devon, page 121.

ⁱⁱTilley, N. (2002) ‘Introduction: Evaluation for Crime Prevention’, in Tilley, N. (ed.) **Evaluation for Crime Prevention**, Crime Prevention Studies Vol. 14, pages 1-2.

ⁱⁱⁱFarrington, Gottfredson, Sherman and Welsh (2002) ‘The Maryland Scientific Methods Scale’, in Sherman, Farrington, Welsh and McKenzie (eds) **Evidence-Based Crime Prevention**, Routledge, pages 16-17.

^{iv}These five tips have been copied from Weatherburn, D. (2009) ‘Policy and program evaluation: recommendations for criminal justice policy analysts and advisors’, Crime and Justice Bulletin, No 133, NSW Bureau of Crime Statistics and Research.