



# 'Not rocket science': evaluating crime prevention

Bill Dixon

---

South Africa has a serious crime problem. Since the National Crime Prevention Strategy was published in 1996, preventing or reducing crime has been a national priority. All sorts of programmes and activities have been undertaken in the name of crime prevention. The sheer scale of the crime problem and the urgent need to do something about it means that people are (perhaps understandably) reluctant to ask difficult questions about whether popular crime prevention measures actually work.

Do closed circuit television (CCTV) cameras on city centre streets prevent crime? Would increased police patrols make township residents feel safer? Do young people who have been helped to confront their offending behaviour go on to commit less crime? It is often far easier for government, donors and individual activists simply to assume that what they are doing is 'crime prevention' and is therefore automatically a good thing.

This chapter is not intended as a 'how to' guide to evaluating crime prevention programmes. Instead it aims to show that asking—and answering—hard questions about what works in crime prevention, how it works, and under what conditions, is essential if South Africa is to make the best use of scarce resources.

With this in mind, the chapter is divided into four sections. The first looks at why evaluating crime prevention programmes is so important. The second section examines some of the reasons why evaluation often seems such a daunting and thankless task. It also suggests why evaluation may not be so difficult and demanding after all. A third section outlines a new, realistic approach to evaluation that focuses on understanding why particular programmes work under certain sets of conditions. The final section lists some key questions that crime prevention evaluations should aim to answer.

## What is evaluation?

It is important to clarify what is meant by evaluation and its application in the field of crime prevention. One of the standard texts on evaluation research suggests the following working definition:

Evaluation is the systematic assessment of the conceptualisation, design, implementation and utility of crime prevention programmes.<sup>1</sup>

In other words, a thorough evaluation of a crime prevention programme should be based on the planned, organised or systematic collection, collation and analysis of data at every stage of its development. It should look not just at the impact of a programme but at the thinking behind that programme, how those ideas have been translated into a plan of action and whether that plan has been followed in practice. Only then can an evaluation go on to ask the more obvious questions about whether, why and how the programme worked by preventing crime.

## Why do evaluation?

It follows from this that a good evaluation should help to answer a series of important questions about a programme or project's development from the germ of an idea to its implementation on the ground. These include:

- *Conceptualisation*. Is the project well conceptualised? Is the project based on a good idea or a bad one? An example of what might turn out to be a bad idea would be a programme that aims to prevent housebreaking by persuading homeowners to surround their properties with high walls. Although walls act as a physical barrier to intruders they also reduce natural surveillance. The net effect of their construction might well be to increase rather than reduce opportunities for crime. Problems at this stage of a programme's development may lead to theory failure.
- *Design*. Is the project design sound? Has the concept been translated into a practical set of measures or activities? Encouraging people to secure their properties by erecting secure perimeter fencing would be a bad piece of project design if the overwhelming majority of householders could not afford to do so. Problems at this stage may lead to design failure.
- *Implementation*. Is the project being implemented according to its design? Are the measures or activities being undertaken as anticipated in the project design? If low-income homeowners are forced to put up inadequate wooden fencing around their homes rather than the special 'security fencing' approved in the project design, the programme is clearly not being implemented according to plan. This amounts to implementation failure.

- *Impact.* Is the project having the impact intended? Are the measures being implemented actually preventing crime? Are homes surrounded by approved security fencing designed to act as a barrier to intruders while maintaining high levels of natural surveillance less likely to be broken into? Only at this stage could a crime prevention project designed to prevent housebreaking by encouraging homeowners to fence their property be said to be a failure if, in fact, it was found that homes 'secured' in this way were just as likely or more likely to be broken into than others. Only in this case could an evaluation talk of project or programme failure.

Important as these basic issues are, they are only some of the key questions about a crime prevention programme that a good evaluation can help to answer. Others include:

- What changes need to be made during the course of the project to ensure that it is implemented successfully? What needs to be done to make sure that the project design is followed by (to carry on with the earlier example) getting homeowners to install approved security fencing rather than walls or other barriers?
- Is the project cost effective? What are the 'opportunity costs' of supporting the project in terms of the benefits that could flow if the resources were used to do something else such as fitting window locks or providing an armed response service?
- Can the project be replicated (successfully implemented) elsewhere? What is it about local conditions—the type of housing, the characteristics of local residents and so on—that contribute to or detract from its success (or failure)?
- What are the unintended consequences of the project? Does the project have unforeseen side-effects? Are these effects welcome, unwelcome or neutral? Does living behind security fencing increase people's feelings of social isolation and diminish feelings of solidarity with their immediate neighbours?
- Even if the project does not seem to prevent crime, does it have other tangible social benefits? Does the programme improve people's quality of life without having any obvious effect on crime? Apart from acting as a barrier to would-be housebreakers (and reducing natural surveillance) a perimeter wall might give homeowners a welcome sense of privacy and enhance their enjoyment of their garden or swimming pool.

The implications of this for organisations and individuals that fund, implement and are affected by crime prevention programmes are clear. Evaluation is an indispensable element in good crime prevention work. Practitioners must build information gathering and assessment procedures into project proposals from the start, instead of scrambling to complete an evaluation when a programme has been completed and vital data lost. Donors must be prepared to fund evaluation not as

an afterthought but as an essential tool in determining how, and how wisely, their money is being spent. And finally, ordinary citizens must demand that programmes are properly evaluated as a first step in holding the people who implement them accountable to the ultimate 'consumers' of crime prevention.

### **Why is so little evaluation done?**

Unfortunately none of this means that more than a tiny fraction of all crime prevention programmes are properly evaluated. Even in countries like Britain with a much longer history of crime prevention work than South Africa, evaluation remains a marginal activity:

[E]valuation is the most deficient aspect of crime prevention and community safety practice. Methodologically rigorous research in the field of crime prevention is the exception rather than the norm. Many of the claims made by politicians and practitioners rest on flimsy methodological foundations.<sup>2</sup>

Action is being taken to remedy this lack of reliable knowledge about what works in crime prevention and there is now a rich archive of research on the subject in several industrialised countries.<sup>3</sup> In South Africa crime prevention research is still in its infancy and very little is known about the kind of programmes that work under local conditions. A quick visit to the website of the Research Resources Centre of the National Crime Prevention Strategy<sup>4</sup> reveals just how few South African crime prevention programmes—many, such as the South African Police Service's Operation Crackdown initiative, costing millions of rands—are ever properly evaluated.

So if evaluation really is such a good thing, why does so little of it ever get done? Apart from the understandable feeling that, given the scale of South Africa's crime problem, any activity must be loudly applauded rather than carefully scrutinised, there are a number of other reasons why prevention schemes are so rarely evaluated.

### ***Problems of definitions***

The first problem is to do with definitions. To say that the concept of crime prevention is far from clear may seem like academic nit-picking. But confusions about the meaning of words tend to reflect confused thinking. And, as we have already seen, shortcomings in the conceptualisation of crime prevention projects may lead to difficulties downstream when work starts on the ground.

But what is the problem with the notion of crime prevention? The difficulty centres around two assumptions: first that there is agreement on what it is that is being prevented and second that it will be possible to tell when the prevention is working. In practice, neither of these assumptions may be valid. Each is considered in turn below.

As any undergraduate criminology student knows, crime is an extremely slippery concept. Defining crime or deciding whether a particular kind of behaviour amounts to crime produces very different answers according to (for example) the age, sex, social group or nationality of those providing the answers. In the context of crime prevention, crime tends to be broadly defined to include:

- Crime in the narrow sense of acts or behaviours that are legally proscribed and attract penal sanctions.
- 'Incivilities', 'nuisances' and other forms of 'troublesome' behaviour that are not necessarily criminal but are regarded as unacceptable or anti-social within a particular community or society.
- Fear of crime and/or incivilities.

The precise connection between crime, incivilities and fear is controversial. For example, if people are very frightened of being attacked or abused on the street they may decide to go out less. This in turn may result in a fall in the rate of street crime by reducing the number of potential targets. In this way, high levels of fear may be associated with relatively low levels of crime. Conversely, if people feel safe when they go out and use streets and public places more often, natural surveillance increases and potential offenders may be deterred by the greater risk of detection.

It may be difficult to work out exactly what the relationships are between the various elements that make up what we instinctively think of as crime worth preventing. But few would deny that they are close enough to make all of them—if only at some time, in certain places and in ways that are carefully thought through—legitimate targets for preventive activity aimed at one or other of these targets or at, say, incivilities or fear as an indirect way of preventing crime.

The idea of 'prevention' is not always easy to deal with either. The first problem is that ways of counting crime or victimisation are flawed. However we count, an unknown but substantial 'dark figure' remains making it difficult to know whether changes in levels of crime are real or merely the products of more or less light being thrown on this gloomy statistic. Another problem is posed by the inherent difficulty of counting events that have been prevented (and therefore not happened) and then attributing their non-occurrence to some purposive preventive activity.

Uncertainty about what is meant by crime and doubts about how we know that something has been prevented pose genuine problems for evaluations of crime prevention. But they are not insoluble ones. The first step is to be clear about the target of a particular activity—crime, incivilities or fear—and how we intend to affect it. Once this has been done, there is more than two decades of research to draw on in devising ways of measuring the impact of an intervention in terms of greater feelings of security and lower levels of crime and incivility.

Another difficulty is with the concept of being able to measure crime prevention. The relative strengths and weaknesses of official (police) crime statistics, self-report studies, victimisation surveys and other methods of collecting data about changes in the rate and distribution of crime and victimisation are now fairly well known although the concept of 'fear of crime' remains a bone of contention in some quarters. But there is a fair amount of agreement about the right measures to use for different types of criminal or 'uncivil' behaviour, and the set of possible relationships between crime, incivility and fear are relatively uncontroversial in theory, even if they may take some disentangling in practice. For instance, most people would accept that police statistics are not likely to provide a reliable guide to changes in levels of drug-taking or violence against women in the home. But the most promising alternatives—generally known as self-report and victimisation studies—are fairly widely accepted as valid techniques in themselves.

Beyond the (not always healthy) growth of what is known as 'managerialism' in so many other areas of criminal justice and public administration has led to the development of performance indicators for the delivery of a range of crime prevention related services, from policing to corrections. These experiences have important lessons for measurement in the field of crime prevention. In particular they suggest that indicators must be:

- *Robust*. Indicators should be resistant to manipulation by those with an interest in 'guaranteeing' success.
- *Outcome-based*. Indicators should attempt to measure impact rather than simply record output.
- *Functional*. Indicators should contribute to the achievement of key programme goals, not encourage routine compliance with organisational policies.
- *Qualitative and quantitative*. Indicators should be qualitative as well as quantitative. All worthwhile activity cannot be counted and not everything that can be counted is worthwhile.

A good example of an indicator that is malleable, output-based, dysfunctional and crudely quantitative would be the establishment of a target number of community safety partnerships as a measure of police performance in the field of social crime prevention. Faced with this kind of indicator it would be relatively easy for the police

to achieve an acceptable standard of performance by setting up the required number of partnerships as empty shells. Existing almost exclusively on paper they might not function as forums for police/community liaison or co-ordinating local crime prevention work but still pass muster as partnerships for crude accounting purposes.

### ***Evaluation is difficult to do***

Apart from these problems with the definition of crime and meaning of prevention, four other reasons why crime prevention programmes are seldom evaluated as rigorously as they should be are worth considering here. The first of these is that evaluation is often seen as a very difficult process, well beyond the capability of most practitioners and something best left to a small group of 'expert' evaluators.

As a form of applied social science, evaluation research certainly is not something to be undertaken lightly. But it is not impossible for people who do not see themselves as scientists to evaluate crime prevention work either. A lot of the data needed to answer key questions about a programme's conceptualisation, design and implementation is (or should be) exactly the kind of basic information collected and processed as a matter of course by good project managers.

The image of research as a set of mysterious procedures administered by people in white coats is also misleading and unnecessarily intimidating. As we shall see in the next section of this chapter, good evaluations do not attempt to recreate the perfectly controlled conditions of the laboratory in order to test crime prevention interventions like a new kind of drug. What they do try to get at is which interventions work to prevent crime under what conditions. To answer these questions, information about what is being done, its effects and the circumstances under which they are obtained has to be carefully collected and analysed.

It is demanding work. But it is not rocket science and acquiring the necessary skills to become competent evaluators should be well within the competence of most crime prevention practitioners.

A final point to bear in mind here is that only the largest, most expensive and sophisticated crime prevention projects merit the most exhaustive, sophisticated and expensive evaluation. Evaluations should be cost effective too. Rather than aim for the perfect or best possible evaluation it will usually be more sensible to attempt one that is merely good enough for the project concerned. Designs should be capable of telling us what we need to know about a crime prevention programme rather than everything we might like to know.

### ***Evaluation can be discouraging***

Another reason why evaluating crime prevention is not as popular as it ought to be is that it is seen as a deeply discouraging process. Asking difficult questions is easily perceived as a threat to a project's existence rather than an opportunity for improving or learning from it. The gloomy conclusion that 'nothing works' is the last thing that donors and activists want to hear after investing large amounts of time, effort and resources in an innovative crime prevention programme.

There are several good reasons why such pessimism about the outcome of evaluations may be unjustified. On the evidence of evaluated programmes worldwide, 'nothing works' is almost certainly the wrong conclusion to draw about crime prevention. What evaluations tend to show—as new, 'realistic' approaches would suggest—is that some things work some of the time in some places, under some conditions. Expecting any given crime prevention programme to work all the time, everywhere, irrespective of local circumstances makes failure an almost inevitable, and inevitably discouraging, part of the picture. No pharmaceutical company would declare a new tuberculosis drug a failure if it failed to cure a hospital ward full of patients, only two of whom suffered from TB.

### ***Concerns about displacement***

Perhaps the greatest source of pessimism about crime prevention projects and their evaluation stems from fears that crime is not being prevented, only displaced to another place, time, or type of offending. Displacement and the difficulty of establishing that it is not taking place has long been the Achilles heel of crime prevention. Fortunately, recent crime prevention studies suggest that the problem of displacement can be overstated because:

- Even when displacement does take place it is rarely, if ever, total.
- The negative effects of displacement may well be offset to a significant degree by a diffusion of the benefits of a crime prevention initiative to places, times and types of crime not specifically targeted by the programme being evaluated. An example of this would be British research on the effects of improved street lighting which indicated that its impact was not limited to the hours of darkness. Much to the surprise of researchers, its installation also seemed to have a positive effect on levels of crime during the day.
- Even if displacement is total, the effort of deflecting it may still be worthwhile if the social harm it causes is reduced in the process. Displacing housebreakings from low cost housing areas where few residents are insured to wealthier suburbs where homeowners are covered might be politically controversial but could be seen as an example of this kind of positive displacement.

### ***Evaluation seems dull***

Evaluation also suffers from an image problem. Compared with 'real' crime prevention work, evaluation can seem worthy but dull. Funders in particular like to support innovative new projects and feel uncomfortable if proposals are overloaded with expenditure on research. When there is so much that needs to be done, why waste time raking over past experiences? The temptation to move on to an exciting new project without reflecting on an old one is strong.

In part, this perception of evaluation is a product of the evaluation-as-afterthought syndrome referred to earlier. This sense of evaluation as a sterile, academic exercise is easily countered if monitoring and evaluation procedures are built in to a project from the beginning and form an integral part of its development. Seen in this way, evaluation can become a dynamic element within a current project rather than a tiresome formality to be completed once a programme has come to an end and the next is about to begin.

More important perhaps is the simple fact that if the thinking involved in evaluation without the action of crime prevention can be dull, crime prevention activity without proper evaluation may be foolish. Well-worn phrases about learning from one's mistakes and not reinventing wheels may be clichéd, but ceaseless activity without pause for reflection is a recipe for wasting time and money, not saving it. There can surely be nothing more pointless and, ultimately, boring than simply repeating the same mistakes over and over again or, conversely, failing to make the best use of a successful technique because finding out whether it worked and why is dismissed as a distraction from fresh activity.

### ***Evaluations can be expensive***

Finally, to complete the list of factors that tend to militate against evaluating crime prevention, we come to cost. Why, the argument goes, waste good money on research when it could be used to support activities instead? There is no doubt that good evaluation research can be prohibitively expensive although, as we have seen, there may well be no point in paying for an evaluation that is much better than 'good enough'. Why buy a Mercedes for the school run when a Citi Golf will do?

In the end, however, the affordability argument can be defeated on its own terms. On closer inspection, it is only sustainable if, like Oscar Wilde's cynic, you are interested in the price of everything but appreciate the value of nothing. In the long run, refusing to fund or carry out adequate evaluation is a false economy. Headless chickens can be excused if they run around aimlessly. People involved in crime

prevention, whether as funders or practitioners, ought to know better. They should be prepared to invest money and effort in assessing what they have done, finding out what went wrong, and what went right (and why) before moving on either to do the same thing again, or something completely different. As the 1998 White Paper on Safety and Security put it:

[E]xpenditure on informed and targeted crime prevention that is monitored effectively has substantial long-term saving benefits for the country.<sup>5</sup>

To sum up, evaluating crime prevention programmes can be difficult, discouraging, dull and dear. Moreover, crime prevention itself is an unwieldy concept that would-be evaluators may have to grapple with for some time before getting down to work. Yet it should also be obvious that evaluation is an essential element in any crime prevention programme and may in fact be much easier, more encouraging, more interesting and less expensive than we might think. What South Africa needs, and is gradually beginning to acquire, is a pool of people with the confidence and experience needed to carry out good evaluations and an environment in which evaluation is seen by funders, government and the public not as a luxury or a nuisance but as a key component of all good crime prevention programmes.

### **What's new in evaluating crime prevention?**

One approach to evaluating crime prevention programmes that tackles many of these problems head on is the 'realistic' method pioneered by two British social scientists, Ray Pawson and Nick Tilley.<sup>6</sup> They have criticised the conventional approach to evaluation (known as quasi-experimentation because it attempts to recreate laboratory conditions familiar from true experiments in the natural sciences) for failing to deliver what crime prevention practitioners and policy makers most need.

Broadly speaking, quasi-experimental methods set out to test the effectiveness of crime prevention programmes by selecting two areas or groups of people that share similar characteristics. Pre-test measurements (in the form of a crime victimisation survey, for example) are then taken in each area before the intervention (let us say, the installation of better street lighting) to be evaluated is made in one (experimental) area but not in the other (control) area.

A second set of post-test measurements (maybe a second victimisation survey) are then taken and a comparison drawn between the two sets of measurements across the two areas. If differences (lower levels of victimisation) are detected in the

experimental area compared to the control area, they can then (with varying degrees of confidence) be attributed to the intervention as the only point of variation between the two areas.

This kind of approach is inadequate in at least two important respects:

- It consistently fails to investigate, and therefore to explain, the mechanisms through which a particular crime prevention programme works or to examine the specific contexts in which it is most likely to be effective.
- Partly as a result of this, it also tends to understate the effectiveness of crime prevention programmes and encourage the pessimism summed up in 'nothing works'.<sup>7</sup>

Realists approach evaluation rather differently. For them, evaluating crime prevention is about understanding the connections between:

- Mechanisms (M)—the ways in which an intervention produces outcomes.
- Context (C)—the conditions under which these mechanisms are triggered.
- Outcome pattern (O)—the sets of effects brought about by the mechanisms triggered in certain contextual conditions.

The process has been summarised by Tilley as:

The product of a piece of realistic evaluation is the development or refinement of ... a 'context, mechanism, outcome pattern configuration', or 'CMOC'. The CMOC is produced in answer to the ... crucial question for evaluation, 'What works for whom in what circumstances?'<sup>8</sup>

### ***CCTV in car parks***

In the same essay, Tilley uses his work on the installation of closed circuit television (CCTV) in crime-prone car parks to illustrate how a prevention programme can be evaluated as a series of mechanisms operating in certain contexts to produce a particular pattern of outcomes. When he took on the job of evaluating CCTV programmes, he began by trying to theorise about how CCTV cameras might affect crime rates. One of the mechanisms he came up with was that the installation of cameras would make it "more likely that present offenders will be caught, stopped, removed, punished and deterred."<sup>9</sup>

He then gave some thought to the variations in context that might activate or inhibit the mechanisms he had identified. One of these was the pattern of offending in a particular car park. If a large proportion of crime was the work of a few very active offenders, 'disabling' them would result in a significant reduction in crime. But if a much larger number of less committed offenders were involved, this

disablement mechanism would be much less effective. Thus, in this very simple example, the outcome pattern (a reduction in crime) is seen as a function of the more (or less) effective operation of a disablement mechanism in two different sets of contextual conditions linked to the prevailing pattern of offending.

### ***Lessons to learn***

There are several important lessons to be learnt from this:

- Good, realistic evaluation depends on devising and testing out simple theories about how a crime prevention programme might be expected to work. These theories link mechanisms triggered in certain contexts to particular outcomes.
- Instead of trying to control differences in context as quasi-experimental evaluators would attempt to do, realists try to collect as much data as they can about those variations in order to discover not just whether but how, when and under what conditions an intervention prevents crime.
- Understanding 'what works for whom in what circumstances' is critical if crime prevention programmes are to be successfully rolled out to new areas. These questions must be answered before programmes can be matched to situations in which they are most likely to succeed instead of being doomed to fail in places where the conditions needed to trigger their preventive mechanisms simply do not exist.

Whether realism really does represent a radically new approach to evaluation (some people argue that it does not) is beside the point. What it does offer to people who commission, pay for, carry out, and 'consume' evaluations is a refreshingly straightforward way of understanding how crime prevention programmes work in practice. The appeal of realistic evaluation is not based on the validity of mysterious 'scientific' procedures that permit inferences to be drawn from the occurrence of change under controlled conditions. It is founded instead on the painstaking collection of data about the world as it exists, practical theorising about how crime prevention interventions can be anticipated to work and careful analysis of their impact in specific social contexts.

### **What should evaluators do?**

This chapter is not supposed to be a 'how-to' guide. Having said that, it may still be useful to summarise the main points that emerged in the form of a series of questions that crime prevention evaluations (and evaluators) ought to address:

- What was the idea or theory behind the programme? (conceptualisation)
- How did the programme attempt to apply this theory or put this idea into

- practice? (design or operationalisation)
- Was the programme implemented as planned? (process or implementation)
  - Did the programme make any difference to the nature or size of the (crime) problem? (the outcome or impact)
  - How did the programme affect the problem? (mechanisms)
  - How did the conditions in which the programme was implemented trigger or inhibit the programme mechanisms? (context)
  - What else—apart from the impact on the problem—happened as a result of the programme's implementation? (unintended consequences or side effects)
  - How long did the programme's effect on the problem (and its side effects) last? (durability)
  - Were the benefits of implementing the programme greater than the costs? (cost-benefit)
  - How, where, for whom and under what conditions could the effects of the programme be reproduced? (transferability or replication)
  - What else do we need to know about the outcome and effectiveness of the programme? (future evaluation).<sup>10</sup>

## Conclusion

Even if evaluating crime prevention never becomes as popular as complaining about crime, there are good grounds for hoping that it may become a central feature of many more programmes.

Government (national, provincial and local), donor agencies and the public are increasingly going to want to know what is being done with their money and in their names. Practitioners inside and outside the criminal justice system, police and 'social crime prevention' activists are all waking up to the need to think as well as to act, to evaluate crime prevention as well as to prevent crime.

The main aim of this chapter has been to show why evaluation should be an integral part of any crime prevention programme. Along the way it has been argued that, despite this, evaluation is often seen as optional and unpopular extra. It is unpopular because crime prevention as an activity is hard to define, and because evaluation itself can be difficult and discouraging work. Worse still, it can seem dull in comparison to actually 'doing' crime prevention and may seem dear when resources are scarce and there is so much work to be done.

On closer inspection, none of these reasons for avoiding evaluation seem very convincing, not least because new, realistic approaches go a long way towards

demystifying evaluation research and helping to explain why particular programmes work to produce distinctive outcome patterns under certain social conditions.

Properly evaluated crime prevention is not just necessary. It is possible too.