Problem-oriented policing

Developing a tailored policing response to a specific problem and evaluating its effectiveness.

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Effect scale	Quality of evidence				
	Effect Impact on crime	Mechanism How it works	Moderator Where it works	Implementation How to do it	Economic cost What it costs
⌄ Overall reduction	■■■■ Very strong	■■☐☐ Moderate	■☐☐☐ Low	■■■☐ Strong	No information

Focus of the intervention

Problem-oriented policing (POP) – also known as problem-solving policing – is an approach to tackling crime and disorder that involves:

- identification of a specific problem
- thorough analysis to understand the problem
- development of a tailored response
- assessment of the effects of the response

POP is an approach to develop targeted interventions, rather than an intervention itself.

A POP approach can therefore be applied to any crime and disorder problem. It should not be viewed as an alternative to interventions in the crime reduction toolkit, but used in conjunction with

them.

POP can be described in the context of the SARA (scanning, analysis, response, assessment) model of problem solving.

The model assumes that by identifying and understanding the root causes of a problem or conditions that enable it to persist, the solution developed to tackle it will be effective.

The SARA model employs four stages.

- Scanning – the identifying and prioritising of potential crime and disorder problems.
- Analysis – the analysis of potential problems, by gathering information and intelligence to identify underlying causes of the problem.
- Response – the development and implementation of tailored activities to address the causes of the problem, as identified in the analysis phase.
- Assessment – the measurement of the impact of the response to test if it had the desired effect and to make changes to the response if required.

[Read more about problem-solving policing and the SARA model](#).

The purpose of this review was to analyse the effectiveness of POP in reducing crime and disorder.

This narrative is based on one meta-analytic review covering 34 studies. The studies focused on the effect of POP on problems such as violent crime, street disorder, drug offences and probationer reoffending.

The review featured here is an update of the review that the previous POP narrative was based on (see Weisburd and others, 2008 in the additional resources section). To avoid double counting of primary studies, this narrative only includes the latest review (Hinkle and others, 2020).

Of the 34 primary studies included in the review, 28 were based on evidence from the USA, five from the UK and one from Canada.

Effect – how effective is it?

Overall, the evidence suggests that POP has reduced levels of general offending.

The meta-analysis found that POP led to a small but meaningful, statistically significant effect on crime and disorder compared to business as usual policing, no intervention or an alternative intervention. One primary study showed a statistically significant increase in victimisation. However, the intervention was reported to have notable implementation difficulties.

The review also analysed the results using an approach that has been suggested as a more suitable effect size measure for place-based studies. This analysis suggested that POP led to a 33.8% reduction in crime and disorder.

Analysis was also carried out to look at possible displacement (crime moving around the corner) or diffusion of benefits (crime reduction in close locations as well as in the targeted location) for place-based approaches to POP. No evidence of significant crime displacement as a result of POP was found and there was some evidence for a greater likelihood of a diffusion of benefits.

How strong is the evidence?

The review was sufficiently systematic that most forms of bias that could influence the study conclusions can be ruled out.

The review considered many elements of validity, conducting relevant statistical analyses.

The authors had a well-designed search strategy that includes unpublished literature and used multiple coders to reduce risk of bias. The review accounted for potential publication bias and used appropriate statistical methods in the analysis of effect size.

Finally, the authors explicitly considered unintended consequences of the intervention such as diffusion or displacement.

Mechanism – how does it work?

As interventions that adopted a POP approach were tailored to specific problems, the mechanisms by which they achieved crime reductions vary.

The review suggests that using the SARA model or a similar approach is a major contributor to POP's effect on crime.

The authors suggest that POP affects change in problem outcomes through an increased knowledge of and responsiveness to the mechanisms through which a particular problem operates.

Using a basic iterative process of problem identification, analysis, response, assessment and adjustment of the response, SARA provides a framework for uncovering the complex mechanisms at play in crime problems and for developing tailor-made interventions to address the underlying conditions that cause these.

The majority of studies in the review used the SARA model. The remainder used a model similar to SARA or derived from it.

- [Read more about problem-solving policing and the SARA model](#)

Moderators – in which contexts does it work best?

The review notes that the effect of the intervention might differ when targeted at places as opposed to people.

Of the 34 primary studies, the 26 place-based interventions (which used a collaborative effort to address issues in a specific geographic location) were more likely to show diffusion of benefits.

The interventions that focused on place managers (such as organisations or individuals responsible for the use of a specific location), offenders or potential victims were not significantly different from each other. The authors did not conduct sub-group analysis to confirm this statistically.

The review authors did not conduct any other sub-group analysis to identify contextual factors that may alter the effects of POP. However, POP interventions are tailored to the contextual conditions of the problems so this type of analysis is problematic.

A separate review (Braga and others, 2019) found that combining a POP approach with a hot spot strategy (targeting activities to those places where crime is most concentrated) can be particularly effective.

Implementation – what can be said about implementing this initiative?

Overall, almost all of the primary studies (32 of 34) reported at least a moderate level of success in implementing the intervention.

The four studies that had the largest effects were all submissions to the Goldstein award and did not specify any notable implementation issues, indicating the importance of issue free implementation.

While few studies reported substantial complications in implementation, the review highlighted that 23 of the 34 included studies did identify some degree of difficulty.

The majority of these studies (15 of 23) reported minor difficulties. Seven classified challenges as substantial, only one encountered major issues and 11 studies did not report any implementation or delivery issues.

There were consistencies across the studies in the types of issues reported. While such issues are in no way limited to POP interventions, this is perhaps indication that POP interventions are at greater risk of certain implementation challenges.

The most common problem with implementation was the lack of commitment from external stakeholders or partners for the various projects.

Actors outside of the police often did not follow the intervention as intended, misinterpreted the aims of the intervention or did not lend assistance as or when necessary. These issues were further exacerbated by the lack of availability of sufficient resources, for either police or partners.

Implementation issues arose when resources were underestimated or the problems identified were too numerous or big to manage.

Five studies encountered issues with public partnerships, where low levels of trust in police interfered with the desired outcomes of the study. Two studies also cited a lack of officer commitment to the intervention, particularly those of senior rank, as a barrier to implementation and the two studies that demonstrated the least success both noted that poor partnerships with agencies and communities limited implementation.

While not highlighted in the review, other research (for example, Bullock and others 2006; Reid and others, 2000; Sidebottom and others, 2020) has indicated that analytical capability is important to

support effective problem-solving.

Problem-solving can be less effective where there is insufficient analysis of the initial problem. This can result from a lack of trained analysts or poor quality data.

Economic considerations – how much might it cost?

There was no formal cost benefit analysis at review level, although the review does present findings of the eight individual studies that assessed cost or hours savings as a result of a POP project.

These assessments were generally based on cost estimates for how much time would have been spent on calls for service or incidents that were prevented by the POP project.

In all cases, the POP project was associated with a substantial cost saving, although the authors recognise that the POP projects without significant impacts on crime would be less likely to include a cost-benefit analysis.

In the review, four studies by UK agencies estimated savings using the Home Office model to estimate the costs of crime.

Durham Constabulary (2017) found that prevented burglaries equated to a saving of £3,640 in police-related costs alone, with even higher estimates when accounting for all system and victim costs.

Lancashire Constabulary (2008) estimated total cost savings across multiple crime categories as a result of their POP project. Burglary savings were estimated at £31,160, criminal damage savings were £36,340 and antisocial behaviour incident savings totalled £26,015.

A second project by Lancashire Constabulary (2012) found a significant reduction in arrests were associated with a total cost saving of £82,000.

The London Borough of Enfield (2011) estimated project cost savings at £934,000, accounting for both police and social costs of crimes prevented.

In the USA, two studies estimated the cost savings based on an estimate of prevented calls to police in retail locations.

The first intervention targeted convenience stores and reduced police spending alone from $43,685 to $25,403. The authors note these estimates are conservative as they did not account for other criminal justice and business costs that may also have been reduced.

The second targeted low-level theft at Walmart and resulted in a saving of 35 hours per month of police time. This equated to a saving of $26,884 in police staffing costs.

Finally, two studies focused on a policing programme that targeted problem guests at motels.

They found the programme reduced the number of police hours spent at the motels by 51%, equating to 1,253.4 officer hours saved per year. On average, partner agencies reduced their time spent on motel-related issues by 92.4 hours per year. The authors did not provide an estimate of the costs equal to the time saved.

Similarly, the Reno Police Department found their motel targeting intervention saved approximately 1,750 officer hours per year but did not provide an estimate for the cost that entailed.

General considerations

- POP is an approach to develop targeted interventions, rather than an intervention itself. Therefore, a POP approach can be applied to any crime and disorder problem and should not be viewed as an alternative to interventions in the crime reduction toolkit, but used in conjunction with them.
- For a POP-based intervention to have the greatest chance of success, the problem to be solved must be well understood to ensure the intervention is tailored to the cause of the problem.
- The studies that had no effect or a negative effect on crime reported notable implementation problems. Effective partnership working and sufficient available resources appeared to be important considerations when implementing a POP approach.
- The authors of the review highlighted several implications for further research.
  - Future evaluations should capture and report more data about the problems targeted, the level of problem analysis applied, the specific responses delivered, and consistently report outcomes by crime type rather than aggregate categories.
  - The primary studies included in the review lacked details on the problem-solving process, which made it difficult to draw strong conclusions about what makes POP most effective. There was minimal cost-benefit analysis in these studies. Those that did examine cost

savings generally used limited data to estimate both costs and benefits and rarely performed analysis systematically.

- It is important for more future studies to evaluate the impact of POP on outcomes beyond the standard crime and disorder. POP was proposed as a flexible approach that can be applied to a wide array of problems. Understanding of the model's potential would be enhanced through studies that assess its impact on issues such as cybercrime, human trafficking and other issues increasingly of interest to criminologists and criminal justice practitioners.
- There is a need for further research on POP interventions that includes close partnership with and involvement of the community. This might be expected to have the greatest impact on perception-based outcomes, such as reducing resident fear of crime, improving citizens' opinions of the police, or bolstering feelings of control over the behaviours of others in the community, known as collective efficacy.

Summary

Overall, the review indicated that using a POP approach can reduce crime and disorder.

The review found an overall positive impact of POP across different types of problems and crime types, measured in different ways.

To maximise chance of success, it is important to consider the implementation issues raised in this review when taking a POP approach to reducing crime or disorder.

Finally, this review found that using a POP approach in hot spots can be particularly effective.

Reviews

Review one

Reference

- Hinkle, J., Weisburd, D., Telep, C. and Petersen, K., (2020) '**Problem-oriented policing for reducing crime and disorder: An updated systematic review and meta-analysis'**, Campbell Systematic Reviews (16)

Additional resources

Bowers K and others. (2011). Spatial displacement and diffusion of benefits among geographically focused policing initiatives. Campbell Systematic Reviews 2011.

Braga A, Turchan B and Papachristos A. (2019). 'Hot spots policing of small geographic areas effects on crime'. Campbell Systematic Reviews, 15:3.

Bullock K, Erol R and Tilley N. (2006). 'Problem Oriented Policing and Partnerships'. Chapter 3. Routledge: London.

Read T and Tilley N. (2000). 'Not Rocket Science? Problem-solving and Crime reduction.' Crime reduction research series paper 6. Home Office: London.

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Summary prepared by

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