

Reducing gang related crime: A systematic review of ‘comprehensive’ interventions

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Context

Gang related crime and anti-social behaviour continue to be issues of concern at both a national and local level. Despite this concern and the desire for effective responses, identifying evidence in relation to reducing or preventing gang related crime and anti-social behaviour is challenging. The majority of available research concentrates on risk factors, gang definitions and explanations of gang behaviour. It does not focus on the effectiveness of specific interventions designed to impact on this issue.

This systematic review was undertaken in order to improve the evidence base on developing interventions focused on gang related criminal activity. It aimed to answer the following question:

What interventions are effective in preventing or reducing gang related crime and anti-social behaviour?

The specific objectives for the review were:

- To produce a systematic map describing the range of research on interventions implemented in response to gang related crime and anti-social behaviour.
- To carry out an in-depth review focusing on a specific sub-group of ‘comprehensive’¹ interventions to identify what effects this type of intervention has had.
- To explore which ‘mechanisms of change’ might be important to underpin the practice of effective interventions.

- To make recommendations for policy and practice based on these findings.

After the initial mapping of the research literature, it was decided to focus on the following in-depth review question:

Are ‘comprehensive’ interventions more effective at reducing gang related criminal activity and anti-social behaviour than usual service provision?

In addressing this question, the review also explored whether some types of comprehensive intervention were more effective than others in reducing gang related criminal activity.

Approach

In order to ensure that the review was relevant to policy and practice, it has been informed by a review advisory group, made up of research users including practitioners, policy makers and academics. Their views informed the initial scope and direction of the review.

A thorough search strategy was developed and all of the main social science databases were searched for relevant research. In addition, ‘hand searching’ of bibliographies and searches of the so-called ‘grey’ literature were undertaken. The initial searches identified 20,672 papers; a systematic screening process reduced this to 208 studies meeting these criteria:

- the studies were linked to gang related crime or anti-social behaviour; and

- they focused on an intervention; and,
- they reported outcomes specifically related to reducing or preventing gang related anti-social or criminal behaviour.

The characteristics of the 208 studies that met these inclusion criteria were mapped in order to refine the research question for an in-depth review. The review advisory group decided that the in-depth review should focus on 'comprehensive' interventions. This was because:

- social problems such as gangs are multi-dimensional in nature and cause;
- these types of initiatives are consistent with current government policy which promotes multi-agency partnership working; and
- the literature in this field suggests that multi-faceted approaches are more likely to be successful;

As a separate review was considering cognitive-behavioural preventative interventions², it was also decided to focus on interventions that were put into place to tackle an existing gang crime problem.

Seventeen studies describing this type of intervention were quality appraised using the Maryland Scale of Scientific Methods³ (Sherman et al, 1998) and were subject to a detailed data extraction of relevant key characteristics (including the precise features of the intervention, the study's methodological design and the results).

A narrative synthesis⁴ of these seventeen selected studies was undertaken which explored the relationships between the characteristics of the intervention, the types of outcomes reported and the key mechanisms identified as driving changes in behaviour. Subsequently, where the data allowed it, the effectiveness of the different interventions was established through meta-analysis⁵. Nine studies reported crime reduction or criminal justice related outcomes (e.g. crime rates, arrests and

court appearances) which met the quality criteria for statistical synthesis. For these studies, meta-analysis was conducted on the crime/criminal justice-related outcomes identified.

Results

Crime reduction outcomes

The meta-analysis of nine studies found that, overall, the comprehensive interventions had a positive, but not statistically significant, effect in reducing crime outcomes compared to usual service provision (i.e. whatever was in place either in a comparison area or before the specific intervention).

None of the studies included in the review considered the cost-benefit of any of the interventions. This kind of information is important to facilitate a more informed decision when choosing between different strategies. Any advantage of comprehensive interventions over non-comprehensive interventions may, for example, come at a greater financial cost.

Mechanisms of change

The review identified a number of mechanisms of change which were present in those studies of interventions associated with positive outcomes. In the higher quality studies⁶ with positive effects, the comprehensive interventions included one or more of the following mechanisms of change:

- Case management/provision that was personalised to individual offenders
- Community involvement in the planning of interventions
- Community involvement in the delivery of interventions
- Expertise shared between agencies

- Delivery of incentives to gang members to change offending behaviour, as part of a wider comprehensive intervention approach; for example educational opportunities, tattoo removal, financial assistance, recreational activities.

However, given that more than one of these mechanisms of change features in each of the 9 high quality studies, it is not clear whether only one of these mechanisms of change is the effective one, or if more than one of these mechanisms are needed to produce the desired outcome (and which combination). In addition, the evidence does not suggest that the actual number of components in a comprehensive intervention is associated with effect size. The results suggest that these are issues that should be investigated further in the evaluation of new comprehensive interventions.

Implications

The evidence is not strong enough to justify firm policy recommendations to use, or not use, comprehensive interventions as a means of tackling gang related criminal activity. The results, however, suggest a small positive effect in favour of comprehensive interventions which warrants further investigation.

The difficulties in evaluating gang prevention and reduction interventions are well documented and, perhaps unsurprisingly, this review found very few high quality evaluations of gang-related interventions. All of the interventions included in this review took place in the USA; therefore their transferability into a UK context would need careful management to ensure relevance and suitability. Comprehensive interventions certainly warrant further rigorous evaluation in a UK context and policy makers should support the use of such interventions in the context of a rigorous assessment.

The design of comprehensive interventions in a UK context should allow further investigation of those specific mechanisms of change which the analysis carried out here suggest are important for the design of successful comprehensive interventions.

References

Fisher H, Montgomery P, Gardner F (2008) *Cognitive-behavioural interventions for preventing youth gang involvement for children and young people (7-16)*. Campbell Systematic Reviews 2008:7

Sherman LW, Gottfredson DC, MacKenzie DL, Eck J, Reuter P, Bushway SD (1998) *Preventing crime: what works, what doesn't, what's promising*. Washington: US Department of Justice.

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- 1 "Comprehensive" refers to multi-faceted approaches encompassing more than one distinct type of intervention.
- 2 Fisher et. al. (2008)
- 3 The Maryland Scale of Scientific Methods is a five-point scale used to classify the strength of scientific evidence; it does not classify the strength of an intervention's effect. Sherman et al argue that only studies with a robust comparison group design can provide evidence of causality.
- 4 Narrative synthesis draws together the results from individual studies to provide an accessible combination of results in structured narratives or summary tables.
- 5 A meta-analysis essentially pools the results from a number of studies together, using a statistical method that gives the greatest weight to the studies with the smallest standard errors, which usually means the studies with the largest sample sizes. This meta-analysis combined the effect size results from individual studies to produce a summary pooled estimate of effect size.
- 6 Those studies which had a higher weight of evidence based on the reviewers' assessment of the methodological design of the study.

Where to find further information

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The results of this systematic review are available in three formats:

SUMMARY

Explains the purpose of the review and the main messages from the research evidence

TECHNICAL REPORT

Includes the background, main findings, and full technical details of the review

DATABASES

Access to codings describing each research study included in the review

These can be downloaded or accessed at <http://eppi.ioe.ac.uk/reel/>

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