Health Research Board

# HRB drug and alcohol evidence reviews

## Drug-related intimidation — The Irish situation and international responses: an evidence review

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## Drug-related intimidation
## The Irish situation and international responses: an evidence review

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## HRB drug and alcohol evidence reviews

The HRB Drug and Alcohol Review series supports drug and alcohol task forces, service providers and policy-makers in using research-based knowledge in their decision-making, particularly in regard to their assigned actions in the National Drugs Strategy. Topics for review are selected following consultation with stakeholders to identify particular information gaps and to establish how the review will contribute to evidence-based selection and implementation of effective responses. Each study will examine a topic relevant to the work of responding to the situation in Ireland.

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# List of abbreviations

| | |
|---|---|
| DRI | drug-related intimidation |
| DDI | drug debt intimidation |
| GREAT | Gang Resistance Education And Training |
| L/RDATF | Local and Regional Drugs and Alcohol Task Forces |
| NFSN | National Family Support Network |
| MABS | Money Advice & Budgeting Service |
| RCT | randomized controlled trial |
| RNR | Risk/needs/responsivity |

# Glossary of terms

*Disciplinary intimidation*: intimidation used to enforce social norms within the drug distribution hierarchy, to discourage or punish informants within the community, or as a means to reclaim drug debts.

*Drug debt intimidation*: a form of disciplinary intimidation targeted at drug users or their friends and family as a means to reclaim an outstanding drug debt.

*Drug-related intimidation:* intimidation carried out by those who are using drugs or those involved in the distribution of drugs.

*Economic-compulsive intimidation*: intimidation by drug users as a means of obtaining money to support drug use.

*Universal gang prevention (preventive awareness):* interventions targeting the general population with the aim of increasing their knowledge and helping them develop skills to avoid risky situations.

*Selected prevention (gang membership prevention):* interventions targeting youth at risk of gang membership; includes assessment of risk prior to inclusion in the programme, and is similar to preventive awareness with greater emphasis on risk factors and risk situations.

*Indicated prevention*: interventions targeting those individuals already engaged in high-risk behaviours, such as opposition behaviour, conduct disorder, antisocial behaviour, substance use and/or delinquency to prevent severe problems, such as gang membership, gang embeddedness and/or criminal activity.

*Gang alternatives:* interventions targeting gang-involved individuals with the aim of reducing the negative impact of gang life on future prospects by supporting individuals to leave their gangs and providing opportunities outside of their gang to prevent relapse.

*Gang activity prevention:* interventions targeting specific activities of gang members, places where gang members are active, or behaviours associated with gang activity to make it harder to engage in gang-related activities and thereby minimizing the impact of gangs on the community.

*Gang activity suppression:* interventions targeting gang members using deterrence-based strategies and sanctions.

*Corrections-based intervention:* interventions targeting gang members on release from correctional institutions.

*Psychopharmacological intimidation*: intimidation by drug users of family, friends or the community as a result of the effects of drug use or withdrawal.

*Successional intimidation*: intimidation used to recruit new members or gain control over drugs distribution networks or territory.

*Systemic intimidation*: intimidation carried out by those involved in the distribution of drugs; can be either disciplinary or successional.

*Effect size:* a quantitative measure of the (standardized mean) difference between the average (mean) score of participants in the intervention group and the average (mean) score of participants in the control group. Effect sizes are usually reported using the label 'd=', and expressed in the form of a proportion, such as d=0.2 or d=0.5. One of the most common ways of interpreting effect sizes is based on Cohen's classification, which indicates that 0 = no difference, 0.2 and below = small effect size, 0.5 = medium effect size, 0.8 and above = large effect size.

# Executive summary

This report presents the findings of an evidence review on drug-related intimidation (DRI) requested by the Department of Health on behalf of the Local and Regional Drugs and Alcohol Task Forces.

## Definitions of concepts

Intimidation is a serious, insidious and coercive behaviour intended to force compliance of another person against their will. It can be either explicit or implicit, involving actual, threatened or perceived threats of violence to a person or damage to property. It can leave targeted individuals, families or communities feeling helpless, isolated, demoralized and fearful. DRI is intimidation carried out by those who are using drugs, or those involved in the distribution of drugs. It includes: disciplinary intimidation, which is used to enforce social norms within the drug distribution hierarchy, to discourage or punish informants within the community, or as a means to reclaim drug debt; and successional intimidation, which is intimidation used to recruit new members or gain control over drugs distribution networks or territory.

## Purpose of the review

DRI is a pervasive and pressing issue negatively impacting the health and well-being of individuals, families, communities and the functioning of local agencies that serve them. The aim of this evidence review is to critically appraise the national and international evidence to identify best practice, community-based responses to DRI to inform: a) DRI action points within the upcoming National Drugs Strategy, 2017–2026, and b) Drugs Task Force action plans for implementing responses to DRI in their local communities.

## Conceptual framework and research questions

In the absence of a body of literature addressing DRI directly, we triangulated three Irish studies describing the underlying structure and operation of Irish criminal and drug distribution networks to develop a conceptual framework for understanding potential pathways into DRI and potential intervention targets to disrupt this pathway (Figure 2). Despite using quite different methodologies and looking at different Irish communities, the three studies offered a consistent picture of a three-tiered, hierarchical network structure involving: 1) a lower tier of highly disadvantaged young people generally involved in bullying, assaulting, stealing, vandalizing, and spreading fear within the community on behalf of the network; 2) a middle tier of young people generally aged between 13 and 25 years who are typically engaged in high-risk, low-reward activities, such as transporting, holding or dealing drugs, carrying guns, conducting shootings, beatings and serious intimidation; and 3) a higher tier of serious players, which is often formed around a kinship core. This framework suggests a number of potential targets for intervention that differ in a) the approach, whether based in criminal justice or from a social inclusion perspective; b) the target, whether they aim to prevent people from joining gangs,

prevent escalation in gang involvement, intervene to promote gang exit, or deter or suppress gang activity; and c) the time horizon of their impact, whether short or long term.

This framework was used to guide the selection of questions for this review, which include:

1. What community-based interventions are effective in preventing entry into gang networks among at-risk children?
2. What community-based interventions are effective in preventing drug use among at-risk young people?
3. What community-based interventions are effective in promoting gang desistance among young people?
4. What community and/or criminal justice approaches are effective in deterring or suppressing drug-related crime, intimidation and/or violence?

To respond to the review questions, we drew on gang control literature, which describes approaches to target the underlying group processes and structures involved in perpetuating a cycle of community intimidation and violence to identify strategies for disrupting each of the pathways identified (i.e. by preventing entry into drug/gang networks, promoting desistance out of drug/gang networks, and suppressing drug/gang network activity). The assumption is that by reducing gang activity by targeting the underlying structure and functioning of drug/gang networks directly, we would indirectly affect the fear, intimidation and violence that they create in their communities. This evidence review focuses on Questions 1, 3, and 4, which inform a cohesive strategy targeting the main potential perpetrators of drug-related intimidation. The response to Question 2 (drug prevention) is presented in Appendix 1 and the main findings are similar to the findings of Question 1 (gang prevention).

## Methods

We systematically searched 10 different bibliographic databases, searched the publication sections of key international organization websites, and searched reference lists of included studies. We screened 1,251 records on title and abstract, 136 on full text, and we included 46 reviews or studies in the final synthesis (Q1: n=15, Q3: n=21, Q4: n=11). Included literature was drawn from 12 countries around the world, but was predominantly from the United States (US).

## Findings

### Prevention

#### Universal

The majority of universal prevention programmes identified in this review were school based, with or without parental involvement, but some were based between the home and community. Collectively, the programmes that worked had positive effects on short-term outcomes such as problem-solving, empathy, conduct problems, antisocial behaviour, delinquency, aggression, and long-term outcomes such as: substance initiation and use, violence and crime. Key features of effective programmes were those with positive goals, parental involvement, group-based and interactive techniques, trained professional facilitators, manualized content, and frequent content delivery. One gang-specific prevention programme (Gang Resistance Education And Training GREAT II) showed promise in preventing gang membership; however, the evidence was drawn from only one moderate-quality study.

#### Selective

Selective prevention programmes target those at higher than average risk and aim to prevent antisocial behaviour, substance use, delinquency and gang membership. There were a number of selective prevention programme models identified in this review. The review found good evidence to suggest that skills-based programmes targeting parents of at-risk children aged 0–3 years have immediate short-term impacts on child behaviour and parenting practices and improvements in long-term delinquency outcomes. Youth mentoring had small beneficial effects on conduct and recidivism. There was no evidence available on the effect of education and employment opportunities provision for preventing gang involvement. Sports programmes in the community had weak evidence that they may reduce youth crime. There was strong evidence that deterrence or discipline-based programmes, such as Scared Straight or boot camps, are ineffective and may be harmful. The key features of effective selective prevention

programmes include: positive goals, involvement of schools and parents, interactive or real-life examples, manualized content, trained professional facilitators, and regular content delivery.

### Indicated

Indicated prevention programmes target those individuals already engaged in high-risk behaviours, such as opposition behaviour, conduct disorder, antisocial behaviour, substance use and/or delinquency to prevent severe problems such as gang membership, gang embeddedness, and criminal activity. These include: a) therapeutic approaches, such as Functional Family Therapy, Multisystemic Therapy, or Multidimensional Family Therapy, often delivered through home visits; and b) gang-specific wraparound approaches, which are highly individualized programmes of care identifying the precise supports needed by an individual and their family and providing them for as long as needed. There is good evidence that indicated prevention programmes incorporating therapeutic principles that aim to create positive changes in the lives of young people and their families prevent negative outcomes. Risk assessment, using available tools such as the Gang Risk of Entry Factors tool, ensures appropriate targeting of indicated prevention programmes.

## Intervention (desistance)

### Gang alternatives interventions

Gang alternatives interventions seek to motivate gang-involved youth to leave their gang, support them in doing so and create opportunities for meaningful occupation outside of the gang. Five identified gang alternatives interventions, involving street outreach or opportunities provision programmes, had limited evidence of no or negligible impact on gang membership status or involvement in gang-related crime or violence.

### In-depth analysis of desistance process

To address this gap in the available evidence, we conducted an in-depth analysis of primary peer-reviewed studies providing descriptive data – either qualitative or quantitative - on the nature or process of gang desistance. Analysis of this data suggested that gang members performed *desistance work* – i.e., effort to reform their identity, pursue prosocial values, and seek belonging among prosocial groups. Gang exit is underpinned by this desistance work, which enables former gang members to become the primary agents in their exit from the gang.

## Suppression

### Gang activity prevention

Gang activity prevention focuses on preventing the actions of gangs responsible for the most harm in the community by targeting specific activities, places or behaviours. Evidence for these approaches was limited in quantity and quality. The most promising interventions in this category are carefully crafted civil gang injunctions, environmental design interventions, and urban renewal efforts, with the latter having positive impacts on crime, while improving police legitimacy and communities' sense of control and cohesion.

### Gang activity suppression

Gang activity suppression interventions seek to suppress or deter the harmful activities of gangs. 'Pulling levers' focused deterrence strategies had the largest direct impact on crime and violence of all suppression strategies reviewed, with moderate evidence of a medium-sized effect on crime and violence. Key features of successful focused deterrence approaches include: targeting specific crimes rather than specific gangs, as the former is more efficient and effective and the latter may counterproductively increase gang cohesion and solidarity; strong, swift and consistent enforcement actions alongside meaningful offers of support by community agencies; establishing a multi-agency task force to lead and coordinate the initiative; and engaging members of the community to assist in identifying the key problem of focus and the key players to invite for notification meetings, and to help increase the legitimacy of the initiative.

# Comprehensive approaches

Comprehensive gang control programmes, combining prevention, intervention and suppression, have shown promise, but have achieved only mixed effects. These mixed effects have been attributed to poor model specification and poor implementation fidelity and an overly complex model given local capacity to coordinate and implement it. While there is some scepticism in the literature about the feasibility of delivering

comprehensive approaches – as currently conceptualized – within most community contexts, it is generally accepted that comprehensive approaches designed within local capacity and resources are likely to be the most appropriate approach to tackling gang-related crime, intimidation and violence in communities where gangs are pervasive and entrenched.

## Implications

- Comprehensive approaches should be developed using the best available information on what works within each of the three domains – prevention, intervention, and suppression. From the literature reviewed here, this suggests:
  - Early intervention programmes involving schools and families, supporting positive goals, involving skills training, delivered by trained professionals and incorporating therapeutic approaches for those identified as higher risk based on risk assessment
  - An assets-based approach to supporting the *desistance work* – or efforts to reform identity and find belonging in prosocial groups – of gang members who are trying to leave their gang life behind
  - A 'pulling levers' focused deterrence strategy designed with community involvement.

- Comprehensive approaches should be designed to be feasibly delivered at a consistent high quality and sustained over time within local resources, including both financial resources and organizational capacity. Implementation quality is key to intervention effectiveness.
- Any comprehensive approach requires partnership among a range of stakeholders, including social services, schools, law enforcement, probation and parole, the courts system, and community representatives. Good coordination and communication is required to maintain this partnership. Clear short- and medium-term goals and responsibilities towards achieving these goals can support the continued engagement of these stakeholders.
- The local community should be included in this partnership. Engaging the local community and the direct and continued involvement of community leaders is important to the legitimacy of the effort. Community has a role to play in defining the key issues, identifying young people within the community who require support, designing responses, and intervention delivery.
- Given the current state of the evidence, any approach that is implemented should have a theoretical underpinning and be informed by local data, it should be clearly articulated in advance, it should be implemented according to protocol with deviations documented, and it should include a process and outcome evaluation. Researcher—practitioner partnerships may be useful in ensuring the use of a data-driven approach, robust evaluation and good implementation fidelity.

## Conclusions

This evidence review provides an overview of the gang control literature, examining in turn community-based approaches to preventing gang entry, supporting gang desistance and suppressing or deterring gang-related crime, violence and intimidation. This review sought to inform the development of strategies to address the rampant intimidation associated with drug distribution within Local and Regional Drugs and Alcohol Task Force areas. The review argues that reducing drug gang activity by implementing a comprehensive gang control strategy, which seeks to prevent young people from joining gangs, promote desistance among active gang members and suppress the activity of persistent gang members, would indirectly reduce the fear, intimidation, crime and violence created by drug gang networks in the communities where they are entrenched. This evidence review systematically summarizes international gang control literature and addresses an identified gap in the evidence, providing unique insight through a theoretical reinterpretation of the gang desistance research. Lessons are drawn from reviews of comprehensive approaches, and implications for the Irish context are presented.

# 1 Introduction

## 1.0 Key concepts and background

The existence of an illicit drugs market has consequences, often violent, for the distributors and buyers engaged in it, as well as for the broader community in which it operates. The intense rivalry among those involved in the importation and distribution of illicit drugs leads to often lethal disputes among competitors. While feuds between rival drug gangs, high-profile violent incidents, and background stories on how this usually clandestine business operates receive substantial media attention, a hidden but more frequently occurring harm is the widespread fear and intimidation experienced by individuals, families, communities and the agencies who serve them in areas where drug markets operate.[1] The willingness of distributors to use or threaten violence to enforce debts, overcome obstacles or ensure silence creates an environment of fear, profoundly impacting communities already dealing with the disorder and property crime resulting from the concentration of drug markets in their areas.[2]

In recent years, drug-related intimidation (DRI) is an issue that has received growing attention as Drugs Task Forces and associated community agencies are increasingly challenged to support service users experiencing its harms. Concern about the detrimental impact of intimidation has been acknowledged by the inclusion within the National Drugs Strategy (Interim) 2009–2016 of Action 5: to develop a framework to provide an appropriate response to DRI in the community.[3] This evidence review responds to the need of Drugs Task Forces for evidence-based community responses to DRI. It begins by providing a conceptual definition of DRI. A description of the nature and extent of DRI in Irish communities, drawing on a number of recent reports and seminar summaries, follows. It then describes a framework illustrating the progression of DRI and identifying potential targets for intervention, before critically appraising high-level evidence for the effectiveness of interventions aimed at each of these targets.

## 1.1 Definition of concepts

Intimidation is a serious, insidious and coercive behaviour intended to force compliance of another person against their will. It can be either explicit or implicit, involving actual, threatened or perceived threats of violence to a person or damage to property. It can leave targeted individuals, families or communities feeling helpless, isolated, demoralized and fearful. DRI is intimidation carried out by those who are using drugs, or those involved in the distribution of drugs.

DRI can be understood in terms of three explanatory categories commonly used to describe the link between drugs and crime: psychopharmacological, economic-compulsive, and systemic.[4] This categorization can be extended to describe the various forms of DRI, which include actual or threatened violence against people or their property.

Psychopharmacological intimidation describes intimidation by drug users of family, friends or the community as a result of the effects of drug use or withdrawal. Economic-compulsive intimidation describes intimidation by drug users as a means of obtaining money to support drug use. Systemic intimidation describes intimidation by those involved in drug distribution. Systemic intimidation can be further classified as either 'disciplinary' or 'successional'. Disciplinary intimidation is used to enforce social norms within the drug distribution hierarchy, to discourage or punish informants within the community, or as a means to reclaim drug debts, whereas successional intimidation is used to recruit new members, or gain control over drugs distribution networks or territory. Figure 1 illustrates this conceptual framework for understanding DRI.

## Figure 1: Conceptual definition of drug-related intimidation in communities

**Legend:**
1. Psychopharmacological intimidation
2. Economic-compulsive intimidation
3. Disciplinary intimidation
4. Successional intimidation

**Note:** The shaded area and dotted lines illustrate the potential complex interrelationships between drug users/user-dealers, family or friends and drug distribution networks. In some cases, the drug user/user-dealer can be a member of the network by whom they are intimidated. Likewise, many Irish drug distribution networks are made up of extended kinship groups. The white area represents the communities that both experience the consequences of DRI and provide the environmental context for its occurrence.

Within this definition, drug debt intimidation (DDI) is a form of disciplinary intimidation targeted at drug users or their family or friends in relation to an outstanding drug debt.

By its nature, DRI is a difficult phenomenon to study or measure for a number of reasons. First, threats can be implicit (i.e. loitering outside one's home, or surveillance) or acts of intimidation may seem like random acts of antisocial behaviour (i.e. youth knocking on doors, throwing stones and spraying graffiti on targeted properties).[5] Second, very often intimidation remains unreported due to fear of reprisals and a reluctance to be seen to be engaging with Gardaí. Despite these challenges, a number of small-scale studies have attempted to examine the nature and extent of DRI in Irish communities, with a particular focus on DDI. These studies, reports and seminar summaries will be used to describe: a) how DDI is experienced in task force areas; b) who is typically involved in intimidating others; c) who is targeted; and d) what impact DRI has on individuals, families, communities and the agencies who support them.

## 1.2 How is drug debt intimidation (DDI) experienced?

Drug debts are accrued when drug users obtain drugs on credit and their consumption outpaces their ability to pay, or when mid-level dealers obtain drugs on credit and either lose or consume their own supply, have it stolen, or have it seized by Gardaí. Recent trends suggest a rise in the use of herbal cannabis in many communities, especially among young people.[6] Many of these young people are offered these drugs on credit, are thereby running up substantial debts quite quickly, and can become victims of intimidation.[7, 8] Intimidation is being used to enforce drug debts, whether large or small. Community representatives and Gardaí describe a 'zero tolerance' approach on all debt, whereby small amounts of debt are enforced as much as larger ones, to set an example for others in the community.[9] Family support workers have reported incidents of intimidation over drug debts ranging from less than €100 to upwards of €40,000.[10] Even at the lower end of the scale, families may struggle to make repayment with limited means and earning capacity and often have to source funds from multiple sources, including: salary/wages; social welfare payments; loans from credit unions, banks, moneylenders or friends and family; savings; remortgaging the home; or selling personal property.[10]

When demands for repayment cannot be met solely by cash, the indebted are sometimes forced to deal, hold or transport drugs, to hold or hide weapons, to engage in sexual acts or prostitution, or to perform violent acts on orders from dealers.[8, 9, 10] DDI can often become a recurrent cycle; drug users take drugs on credit, they are intimidated to repay debts by dealers or their enforcers, they repay debts, then they are offered more drugs on credit and the cycle continues as their addiction grows. While 36% of families engaging with community services reported that the intimidation stopped after repayment, 11% reported that it continued, and 40% reported that it stopped, but only until the dealer offered more drugs on credit.[10]

DDI may include: verbal threats, physical violence, damage to the home or property, and threatened or actual sexual violence.[10] An audit of 140 intimidation incidents reported to community services in 13 Drugs Task Force areas (11 local and 2 regional) suggests that the majority (76%) of reported incidents of intimidation involved verbal threats, 46% of all incidents involved physical violence, and 32% involved damage to the home or property. As an example of intimidatory behaviour seen in communities, representatives of An Garda Síochána Drugs and Organised Crime Bureau described the 'dead door', where a shot is fired through the front door or window of the home of an indebted drug user or their family as a warning to settle the debt.[7] A workshop hosted by CityWide in May 2011 attended by over 80 people, with a broad representation from services, task forces, communities, families and activists, explored experiences of DDR and DDI specifically in their communities.[9] Participants described examples of attacks on property, including the use of petrol bombs, breaking of windows, burglaries, and arson of houses and cars and attacks on individuals and family members, including markings, stabbings, beatings, hostage taking, murder and sexual violence.

## 1.3 Who is targeted by DDI?

The drug users who amassed the debt are not the only targets of DDI; family members or friends are often targeted.[10] While family support workers have reported incidents where fathers, grandparents, children, brothers, sisters and partners have been targeted, mothers tend to be commonly targeted and are also most likely to seek support.[10] If a drug user or mid-level dealer goes into prison or treatment, or dies, the debt remains owing and family or friends may be pursued.[7, 8, 10]

## 1.4 Who are the perpetrators of DDI?

Most drug-related and drug debt intimidation is committed by people acting in networks,[8] and in many cases victims and perpetrators know each other, as they are from the same community or estate.[11] Rarely, the drug dealer actively intimidates those who owe money; more often it is associates within the network who intimidate on behalf of the dealer.[8, 10] 'Child street gang participants' or 'foot soldiers' may be involved, or other users may carry out acts of violence on orders from the dealer to settle their own debt.[5]

## 1.5 What is the impact of DDI and DRI?

DDI has a profound impact on individuals, families, communities and the agencies who serve them. For individuals, the enforcement of debts can result in physical harm, disfigurement, or death. The persistent stress and fear of intimidation can also have considerable consequences for their physical and mental health, with associated risks of self-harm or suicide. Young people who accrue debts that they are unable to pay may get drawn down a path of criminal activity as a means of settling debts. Moreover, young people may seek protection from intimidation through gang involvement, which perpetuates a cycle of violence and intimidation in communities.[11]

For families, intimidation adds another element of disorder for those already coping with the chaotic life of a problem drug user. The fear and stress experienced by family members who are victims of intimidation can strain relationships within the family unit. DDI can contribute to financial difficulty for families, as they use limited means or take out loans themselves to repay the drug debts of the drug-using family member, only to have them run up further debt. Moreover, it can affect the mental, physical and social well-being of children in the household who witness violence, are subject to threats, or are targeted directly by intimidators. Loughran and McCann (2006) found that families suffered from the stigma attached to living in areas with known drug problems, even if they were not directly involved.[12] Families may become isolated and stigmatized within their own communities as a result of intimidation.

While DDI has serious consequences for those targeted, it is only one aspect of DRI that impacts communities where drug markets are concentrated. The visible presence of a drugs market in these communities, including: on-street dealing, open use of drugs, drug litter, property damage or vandalism, and public acts of violence, contribute to the normalization of drug use and intimidation in a community.[8, 13] Children growing up within this community are vulnerable to being socialized into drugs and gang culture and, in some areas, adults in the network appear to actively recruit and cultivate these vulnerable children, grooming them to join networks and their criminal activities.[13, 14]

Pervasive DRI leaves many local residents feeling vulnerable and unsafe in their own communities,[15, 16] limits their use of communal spaces through the creation of 'no-go' areas, and impacts their quality of life.[8, 16] A study conducted in three areas of Dublin with a community drug problem found that many people are fearful of groups of young people congregating to use drugs and those involved in the drug trade, particularly as the nature of drug-related crime has become more violent.[12] Moreover, community fear impacts local residents' willingness to engage with state institutions, local policing structures and community-based responses to the local drugs problem, due to fear of reprisals.[8, 16] This breakdown in community cooperation can leave residents isolated from each other and from the agencies tasked with supporting them.

Community agencies are not immune to the effects of intimidation. In focus groups with over 80 people representing community-based services, Drugs Task Forces and community representatives, conducted as part of a seminar on intimidation hosted by the CityWide Drugs Crisis Campaign, it was reported that drug dealers were starting to intimidate drugs projects by loitering outside project facilities and vandalizing their property.[17] This targeted low-level intimidation can result in service users disengaging with community projects. Similarly, residents engaging as community representatives with Drugs Task Forces, community policing forums, or other anti-drugs initiatives may find themselves targets of intimidation and may fear being seen to be involved with these structures.[18] In addition, some community workers have expressed feeling vulnerable to intimidation due to the information they receive during the course of their work.[17] A survey of local projects in Dublin's North Inner City found that almost two-thirds of project workers were concerned at least some of the time about their own or a colleague's safety when supporting service users with issues relating to violence, intimidation or threats despite the majority of services having a working policy to support staff when dealing with these situations.[19]

## 1.6 Responses to DDI and DRI in Ireland

Acknowledging the profound impact of DRI, Drugs Task Forces and other state or community agencies have undertaken initiatives to raise awareness of this issue, describe the nature and extent of intimidation, and respond to it in their local communities. Table 1 provides a chronological summary of some of the actions taken in this regard and their outcomes.

The most direct response to the issue of DRI is the National Drug-Related Intimidation Reporting programme[20] and the associated QUADS Responding to Intimidation Policy[21] developed by the Family Support Network and An Garda Síochána Drugs and Organised Crime Bureau. The policy provides a framework to ensure that drug users and their families who disclose an incident of intimidation to a community support worker receive a standardized response and access to a designated Garda Inspector if required. As outlined in this policy, support workers make a private space available, offer to outline the support options available and clarify the issues and potential consequences of different courses of action. They explain the role of the nominated Garda Inspector and clarify the difference between a formal complaint and an initial meeting with the Garda Inspector to seek advice. Garda Inspectors, who have been selected by the Garda Commissioner, can meet with those experiencing DRI informally and provide advice in relation to a specific threat or instance of intimidation, provide practical safety information, and provide information on the process and consequences of making a formal complaint. The programme was initially piloted in 2009 and reached national coverage with a nominated Garda Inspector in every Garda Division in Ireland by the end of 2013. To date, the programme has not been formally evaluated.

### Table 1: Summary of responses to DDI and DRI in Ireland

| Date | Action | Outcome/Findings | Reference |
|---|---|---|---|
| 2003 | Drugs Crime and Community: Monitoring Quality of Life in North Inner City Dublin | The North Inner City Dublin Drugs Task Force commissioned a study to ascertain the quality of life in an area of Dublin's North Inner City, with a particular focus on the impact of drug-related crime and antisocial behaviour. The study found that drug-related crime and antisocial behaviour exacerbates the already serious social problems in the area and corrodes community cohesion. The few repeat offenders have a substantial impact on the quality of life of those living in the local community. It calls for sustainable, interagency and community-based interventions with a balance of prevention and intervention. | 16 |
| 2006 | Dial to Stop Drug Dealing Campaign Pilot | Blanchardstown Local Drug and Alcohol Task Force launched and evaluated a Dial to Stop Drug Dealing campaign targeted at local communities in the Dublin 15 area. The number was a non-Garda confidential, free phone number operating 24 hours a day, 7 days a week. This provided a model for ways in which members of the community experiencing intimidation could report it or seek advice. | 22 |

| Date | Action | Outcome/Findings | Reference |
|---|---|---|---|
| 2006 | A community drugs study: developing community indicators for problem drug use | A qualitative participatory research study exploring the experiences of communities of the drug problem since 1996. The study documented a sense of fear expressed by many people resulting from groups of young people congregating and using drugs and alcohol and how this fear negatively impacted social cohesion. It documented visible local drug dealing, greater violence associated with drug dealing, and a greater sense of intimidation from street gangs. | 23 |
| 2008 | Family Support Network/Garda Survey | A survey of 10 areas was conducted to ascertain the nature and extent of drug-related intimidation. | 10 |
| 2008 | Money Advice & Budgeting Service Training | MABS advisors receive training on links between addiction, debt and the money advice process. | 10 |
| 2008–2009 | Dial to Stop Drug Dealing Campaign National Rollout | Based on the success of the campaign in Blanchardstown, the decision was taken to roll out a national initiative. The campaign was launched in regions across Ireland in three phases between October 2008 and July 2009. Evaluation of the campaign noted increasing reports to the phone line of the incidence of intimidation, particularly in the Dublin North Inner City area. | 24 |
| 2009 | Intimidation of Families Report – National Family Support Network | A descriptive survey of family support workers/facilitators about the nature and extent of DRI experienced by families availing of support through these services, including 78 case reports. Describes the targets of intimidation, how they are intimidated, the reasons for intimidation, and how victims responded to intimidation. | 10 |
| 2009 | National Drugs Strategy (Interim) 2009–2016 Department of Community, Rural and Gaeltacht Affairs | Action 5: Develop a framework to provide an appropriate response to the issue of DRI in the community. An Garda Síochána assigned a lead role, with support from the Family Support Network, and the Department of Justice and Equality. | 3 |
| 2010–2011 | FSN/Garda Intimidation Reporting Programme Pilot | Drug-Related Intimidation Reporting Programme framework developed and piloted in the Dublin Metropolitan region. | |
| 2011–2013 | FSN/Garda Intimidation Reporting Programme Expansion | The programme was expanded to the South East region in 2012, then to the South and West Regions in early 2013. Alongside the expansion, a number of initiatives were developed to further the use of the programme, including training, the development of an information leaflet and an online campaign. By the end of 2013, the programme was in place nationally, with a nominated inspector in every Garda Division nationwide. | |

| Date | Action | Outcome/Findings | Reference |
|---|---|---|---|
| 2010 | An Overview of Community Safety in Blanchardstown | Involved a household survey which found high prevalence of reported harassment or intimidation in the local area, with over half of households in one of the sampled areas reporting becoming victims of harassment or intimidation, and 82% reporting witnessing harassment or intimidation. | 15 |
| 2010 | CityWide Conference: A Community Drug Problem: defining the problem – defending the responses | A seminar divided into three main sections: 1) engaging communities of interest in service provision and policy development; 2) challenges for communities – changing patterns of drug use; and 3) community safety. The issue of intimidation emerged as a central issue for many communities throughout Dublin. | 25 |
| 2011 | Understanding Limerick: Social Exclusion and Change | This three-year ethnographic study on intimidation, fear and feuding in Limerick provided insight into the hierarchical structure of Limerick's family drug gangs, the impact of social exclusion and fear-based respect on the socialization of young people into drugs gang culture, and the role of intimidation in creating regimes of fear. | 5 |
| 2011 | CityWide Conference: Working together – tackling intimidation | A conference attended by over 80 people with broad representation from services, task forces, communities, and activists. Involved four presentations on responses to intimidation in communities, workshop sessions exploring the experience/impact of intimidation in communities, responses taken and actions needed, and a plenary discussion session. | 17 |
| 2012 | A Safe County Seminar Tallaght Drugs & Alcohol Task Force | Seminar held to discuss DRI, to identify the extent of the problem and explore ways that the community could address it. National Family Support Network and Garda National Drugs Unit made presentations on the reporting programme. Recommendations arising from this event were sent to the Joint Policing Committee and a subgroup was established to focus on issues of intimidation. | |
| 2012 | *The Drugs Crisis in Ireland: A new agenda for action. CityWide Policy Statement* | This report acknowledges the current challenge of on-street drug dealing in disadvantaged communities, many of which are besieged by gang violence and drug debt intimidation. It notes that the cycle is set to continue as children and young people are groomed to join gangs, and fear of gang reprisals prevents the reporting of incidents. Among other things, this report calls for improved protection, reporting and prosecution of DDI, systematic approaches to tackle gang activity, and intensive and coordinated early intervention to target children and young people most at risk. | 18 |

| Date | Action | Outcome/Findings | Reference |
|---|---|---|---|
| 2013 | *QUADS Responding to Intimidation Policy and Drug-related intimidation*. Leaflet published by the Garda National Drugs Unit and the National Family Support Network | The QUADS Policy document provides community organizations with a framework for supporting service users to present to them with concerns about intimidation. It outlines each of the options available for supporting individuals experiencing intimidation, with consideration of safety, confidentiality and child protection issues. It also outlines steps that can be taken to protect the service provider. | 20, 21 |
| 2013 | *CityWide Seminar Report on Drug-related Intimidation in Communities*. 9 April 2013 | This seminar was a further step in a series that CityWide has taken to bring people together on the issue of intimidation and the effects it has on communities. It involved 80 participants from community drugs projects, youth services, Drugs Task Forces, and community policing and safety forums from around the country. There were three presentations (the National Family Support Network, Safer Blanchardstown, and Understanding Limerick ethnographic study), two table discussions and a research proposal. | 26 |
| 2013 | Safer Blanchardstown – Melting the iceberg of fear (revised in 2015) | A descriptive study, including interviews with senior outreach staff from community agencies, literature review and documentary review of local public meeting minutes in Mulhuddart, Dublin. Describes an iceberg of intimidation in terms of three orders: low, middle and higher order, with an ascending severity of intimidation. Makes recommendations for potential interventions that may be relevant at each level. | 27, 28 |
| 2013 | Trends and behaviour survey – violence, intimidation and threats. North Dublin Inner City Task Force | An online survey of issues relating to violence, threats and intimidation experienced by individuals and groups engaging with local projects in the North Inner City was conducted in October 2013. The survey found considerable engagement with services around issues of violence, threats and intimidation (18%; 501/2,752 service users from 13 services), 28% of which was estimated to be drug related. | 29 |
| 2014 | *Illicit Drug Markets in Ireland*. Report published by the National Advisory Committee on Drugs and Alcohol and the Health Research Board | An exploratory study conducted between 2008 and 2010, including a cross-section of four drug markets (two urban, one suburban, one rural). All four sites reported an increase in violence associated with the drug trade, largely related to unpaid debts. | 30 |

| Date | Action | Outcome/Findings | Reference |
|---|---|---|---|
| 2014 | Submissions sought to Oireachtas Joint Committee on Gangland Crime. 28 July 2014 | Deputy Finian McGrath TD agreed to produce a report with recommendations on the gangland crime issue. Submissions were sought from interested groups or individuals in relation to the effects of gangland crime on communities. Submissions were received from the CityWide Drugs Crisis Campaign, and the Association for Criminal Justice Research and Development. | |
| 2014 | Oireachtas Joint Committee Debate. Effects of Gangland Crime on the Community. 10 December 2014 | The committee heard presentations from the Association for Criminal Justice Research and Development, CityWide Drugs Crisis Campaign, Dublin North East Drugs Task Force, and the Probation Service. | |
| 2015 | Oireachtas Joint Committee Debate. Effects of Gangland Crime on the Community. 17 February 2015 | The Committee heard presentations from representatives of the Gardaí, the Health Research Board, and community policing boards. The report was never finalized or published and submissions to the consultation are not publicly available. | |
| 2015 | Drug-related intimidation seminar for Dublin, Kildare and Wicklow-based services and Task Forces | A seminar on the Drug-related Intimidation Reporting Programme organized by the Drugs and Organised Crime Bureau and the National Family Support Network. The purpose of the seminar was to share learning about the use of the reporting programme in local and regional area services. It included presentations from two family support workers, two nominated inspectors and two task force areas. | |
| 2016 | Demanding money with menace | An audit of over 140 incidents of DRI reported to projects in 13 Drugs Task Force Areas. Provides descriptive evidence on the profile of victims and perpetrators, the nature of incidents, reasons behind the incidents, actions taken in response to the incidents, reporting of the incidents, and the impact of the incidents, with discussion of the policy implications of the findings. | [8] |

There are a number of challenges inherent in responding to DRI. First, many of the intimidation activities of drug dealing gang networks are perfectly legal; for example, loitering in front of properties, stare-downs, vague verbal and written threats or implied threats. Second, victims of intimidation who formally pursue legal action against intimidators are not protected by anonymity. The Irish Constitution holds that an accused person has the right 'to hear and test by examination the evidence offered by or on behalf of his accuser' and the accuser must be identified. The identification of the accuser would expose him or her and his or her friends and family to the risk of further, and potentially more serious, intimidation. Both of these points suggest that preventing intimidation before it occurs may be easier than addressing it after it occurs.

## 1.7 Conceptual framework for interventions targeting DRI

Three studies in particular offer insights into the underlying structure and operation of Irish criminal and drug distribution networks, which are useful for guiding thinking about potential responses to DRI in communities.[5, 14, 27, 28] In a descriptive study on DDI in the Blanchardstown area of Dublin, Jennings[27, 28] uses Wyrick's (2006)[31] 'response pyramid' and an iceberg analogy, with a lower, middle and higher order of DRI, to describe how young people can be socialized into drug gang culture and intimidation. Within this framework, the lower order of intimidation involves children and young people, generally 8–16 years of age, bullying, assaulting, stealing, vandalizing, and spreading fear within the community, often directed to do so by older siblings or friends involved in the middle order. For example, community representatives describe how large gangs of very young children (i.e. 10–12 years old) are roaming areas and intimidating communities.[17] In some areas, adults are grooming vulnerable children and young people to join gangs and their criminal activities.[14, 18] Often, the children who are targeted are seen as susceptible. They are initially used to deliver or collect drugs, money, or firearms,[18] or may be asked to deal drugs to friends or other children so as to create debt and force them into further involvement, thereby drawing these children into the middle order.

The middle order is where the most prolific offenders of DRI and all crime types operate. It involves youth aged 13–20 years, many of whom are recruited from the lower order. Those operating in this order tend to be early school leavers, unemployed, and engaged in misusing drugs and alcohol. Moreover, many of the youth involved in the middle order are engaged in psychopharmacological intimidation when under the influence of drugs or economic compulsive intimidation, including burglaries, theft, and mid-level drug dealing to make a profit to feed their own habit. Many within the middle order can find themselves both victim and perpetrator of disciplinary intimidation, including DDI.

The higher order involves gang members and leaders, usually 17 years of age and older, who actively defend and try to expand their market share and engage in serious systemic intimidation and violence. Based on analysis of interviews and community contributions to public meetings, Jennings suggests that intimidation occurring at the lower order is linked to intimidation taking place at the middle and possibly the higher orders, and that interventions targeting serious DRI must take account of the interrelated and progressive nature of intimidation between the higher, middle and lower orders.[27, 28]

This three-tiered structure is echoed within Hourigan's[5] earlier description of Limerick's family gang criminal hierarchies, based on a three-year ethnographic study of organized crime, intimidation and community violence in Limerick between 2009 and 2011; it involved 221 interviews with local residents, those on the fringes of criminal gangs, Gardaí, social, community and youth workers, 100 hours of participant observation, and four focus groups with local community residents.[5] Hourigan describes three distinct layers in the gang structure: child gang participants, foot soldiers and serious players. Child gang participants tend to come from the most socially deprived pockets of disadvantaged estates, often have little parental guidance, and poor school attendance. They are engaged in intimidation ranging from mild to severe, most often directed by foot soldiers. The foot soldiers are predominantly young men aged 15 to 25 years who are involved in high-risk, low-reward gangland activities, including: transporting, holding and dealing drugs, carrying guns, conducting shootings, beatings and serious intimidation on behalf of the serious players. Young people become foot soldiers in these gangs through three routes: 1) familial relation to the serious players, 2) progression from child gang participant, or 3) through drug addiction. Young people may purchase drugs from these gangs and get drawn into gang activities as a means to pay for drugs or repay debts.

The third study was an innovative case study using social network analysis applied to official crime incident reports to construct a network map connecting co-offenders involved in burglaries and drugs for sale and supply, which was then used as the basis for interviewing Gardaí about a criminal network in a local community and its role in influencing local children's trajectories of criminal involvement.[14] This study[14] found evidence of a 'criminal network which … was hierarchical in nature and was governed by a family kinship-based "core". The hierarchical structure was supported by a deeply embedded sympathetic culture in the area, as well as powerful ongoing processes – in particular, patronage-based relationships which

shared the rewards of crime among associates, but also generated onerous debt obligations' (p. 7). This criminal network played a significant role in recruiting child network actors to engage in criminal behaviour on behalf of the network and reducing opportunities for members to exit the network.[14] Using a very different approach to the previous studies, the Greentown study described a three-tiered, hierarchical network structure, with the kinship core, associate members and child network actors consistent with that described by Jennings[27, 28] and Hourigan.[5]

In addition to the three-tiered hierarchical structure, another common and distinguishing feature of Irish criminal gangs described in these studies is the role of family and kinship in structuring the gangs. The described gang structures reflect an emphasis on kinship relations, with family playing a key role in structuring the hierarchies of a number of prominent criminal gangs.[32]

In the absence of a body of literature evaluating interventions to target DRI or DDI directly,[1] we used the common features of these three in-depth Irish studies to develop a conceptual framework for understanding potential pathways into DRI and potential intervention targets to disrupt this pathway (Figure 2). Using this framework, we identified a number of potential responses to DRI that would differ in terms of the intervention approach (prevention (universal, selected, or indicated), desistance, and suppression), the subject (victims (i.e. drug users) versus perpetrators (i.e. network actors)), the time horizon (short- or long-term effects) and the perspective (social inclusion versus criminal justice). The research questions for this evidence review flow from this conceptual framework, and each focuses on a potential intervention target to disrupt the pathway into DRI. These are outlined in Table 2.

## Table 2: Research questions for evidence review

| Research question |
|---|
| 1. What community-based interventions are effective in preventing entry into gang networks among at-risk children? |
| 2. What community-based interventions are effective in preventing drug use among at-risk young people? |
| 3. What community-based interventions are effective in promoting gang desistance among young people? |
| 4. What community and/or criminal justice approaches are effective in deterring or suppressing gang-related crime, intimidation and/or violence? |

The review questions emphasize community-based interventions because the main aim of this review is to inform the actions of the Local and Regional Drugs and Alcohol Task Forces in responding to DRI in their communities. These Task Forces comprise representatives from a range of relevant community-based agencies, including: the Health Service Executive, the Gardaí, the Probation and Welfare Service, Education and Training Boards, Local Authorities, the Youth Service, as well as elected public representatives and voluntary and community sector representatives.

1 In initial scoping searches, described in further detail in the Methods chapter/Appendix 2, it was determined that a body of literature evaluating interventions targeting drug debt intimidation or drug-related intimidation specifically did not exist.

Given time and resource constraints, for the purpose of this evidence review we will critically appraise the international literature providing evidence to address Questions 1, 3, and 4. These three questions were selected, as together they would inform a cohesive strategy targeting the main potential perpetrators of DRI. Moreover, the intervention targets identified (gang prevention, desistance and suppression) are consistent with recommendations from Irish agencies active in the area[18, 28] and feedback from Drugs Task Force representatives. Preventing drug use addresses the main potential victims of DRI and one potential pathway into becoming a perpetrator of DRI, in so far as drug users are drawn into gang activity to repay debts. There have already been a number of recent, high-quality systematic reviews addressing Question 2 and targeting drug use prevention. Moreover, there is already a great deal of work underway in the context of the development of the National Drugs Strategy and the ongoing work plans of the Drugs Task Forces to address drug use prevention and other demand reduction interventions. Within this context, a pragmatic decision was taken to summarize recent reviews in response to Question 2 in Appendix 1 for completeness. This summary complements the findings of our evidence review (Questions 1, 3, 4) and provides a comprehensive, integrated community response to drug-related intimidation.

## Figure 2: Conceptual framework for understanding drug-related intimidation and potential intervention targets

# 2 Methods

## 2.0 Focus of the review

In the absence of a body of literature evaluating interventions targeting DRI directly, we draw on gang control literature which describes approaches to target the underlying group processes and structures involved in perpetuating a cycle of community intimidation and violence. In applying this evidence to the Irish experience of DRI, a few key issues need to be considered. First, this approach assumes that reducing gang activity by targeting the structure and functioning of gangs will indirectly reduce the fear and intimidation that gangs create in their communities. Second, this approach assumes the transferability of 'street gang' control strategies to the subgroup of specialty gangs involved in the distribution of drugs in local communities. Lastly, this approach assumes that gang control strategies developed internationally are relevant in the Irish cultural context where kinship ties play a larger role in structuring gangs than they do in the US and UK context, for example.

With these assumptions in mind, we focus on literature evaluating interventions directed at each of the targets identified in the conceptual framework in Figure 2: gang prevention, gang desistance, and gang suppression in order to respond to Questions 1, 3 and 4 as outlined in Chapter 1 Section 1.7. To address these questions, we adopted a rapid review approach. A rapid review is a 'streamlined approach to synthesizing evidence in a timely manner – typically for the purpose of informing emergent decisions faced by decision-makers in healthcare settings' (p. 1).[33] Rapid review approaches have been widely used to provide health decision-makers with timely access to the best available evidence given limited resources.

## 2.1 Search strategy

### 2.1.1 Initial scoping

As a scoping exercise to inform our approach, we performed a broad search of Google and a selection of bibliographic databases (Cochrane Database of Systematic Reviews, Campbell Database of Systematic Reviews, PsycINFO, Social Policy and Practice and SocINDEX) to ascertain the breadth of evidence addressing the concepts of 'drug-related intimidation' and 'drug debt intimidation'. These phrases yielded few results across the databases, most of which were deemed irrelevant on preliminary screening.

It was apparent from this scoping exercise that the phrase 'drug-related intimidation' was found primarily in Irish grey literature, published reports, task force and community organization reports and media websites. Rarely was it mentioned in any international literature, reports or websites. Similarly, the phrase 'drug debt intimidation' yielded few results in the bibliographic databases, and again the Google search indicated that this phrase is used primarily in an Irish context and is not used in the international literature.

That is not to say that the international literature does not address the concepts of DRI or DDI or the behaviours that these terms are used to describe in Ireland; rather, these concepts are described using different language or terminology, and they appear to be contained in research that more broadly addresses drug-related crime and violence, gang-related crime and violence and community violence. In the absence of a body of literature

evaluating interventions to target DRI specifically,[2] we used the conceptual framework in Figure 2 to guide the selection of research questions for this review and used these focused questions to develop our search strategy.

### 2.1.2 Sources searched

We searched the following databases:

- Campbell Collaboration Library of Systematic Reviews
- Cochrane Database of Systematic Reviews (CDSR)
- Database of Abstracts of Reviews of Effects (DARE)
- EBSCO Psychology and Behavioural Science Collection
- EPPI-Centre Evidence for Policy and Practice Information and Coordinating Centre (EPPI-Centre)
- International Prospective Register of Systematic Reviews (PROSPERO)
- MEDLINE
- Joanna Briggs Institute Database of Systematic Reviews and Implementation Reports (JBISRIR)
- PsycINFO
- Social Policy and Practice
- SocINDEX

Separate searches were developed specifically for each database. While no date limit was applied to the searches, an English language limitation was applied. All the searches were conducted in August 2016.

Additional grey literature was identified by searching the publications sections of websites of relevant organizations, including: UN Office on Drugs and Crime, UK Home Office, Early Intervention Foundation, the Centers for Disease Control and Prevention, the US Office of Juvenile Justice and Delinquency Prevention, the Eurogang Project, and the National Gang Centre.

We also screened references of included reviews to identify any other eligible records. Lastly, any relevant material identified by the review team through initial scoping searches was also included.

### 2.1.3 Search terms

Search terms were identified from key papers and references identified in the scoping searches and by browsing database thesauri (e.g. MEDLINE MeSH, PsycINFO Thesaurus of Psychological Index Terms). It was determined following the scoping search that the body of literature addressing gang prevention was substantial enough to enable us to focus on systematic reviews only, so the search for Question 1 was restricted by study design (systematic review) in addition to the English language restriction. The literature addressing Questions 3 and 4 appeared to be less established and developed, and therefore no study design restriction was applied. Full details of the search strategies used for each question are outlined in Appendix 2. The framework to organize search terms and concepts is presented in Table 3.

## Table 3: Framework to organize search terms and concepts

| Question | Population | Intervention | Comparator | Outcomes | Limits |
|---|---|---|---|---|---|
| 1 | At-risk children and variations on this term | Any community-based interventions | Any | Entry into a gang | Systematic review, English language |
| 3 | Young gang members, and variations on this term | Any community-based interventions | Any | Desistance from a gang or gang exit | English language |
| 4 | Young gang members and young adult gang members | Community-based OR criminal justice-based interventions | Any | Reduction in gang-related crime, intimidation or violence | English language |

2 In initial scoping searches, described in further detail in the Methods chapter/Appendix 2, it was determined that a body of literature evaluating interventions targeting drug debt intimidation or drug-related intimidation specifically did not exist.

All identified references were imported into EndNote X7 and de-duplicated. References were subsequently imported into EPPI Reviewer 4 for title and abstract screening, full-text screening and data abstraction. A full outline of the search process and results is depicted in Figure 3.

## 2.2 Inclusion criteria

### 2.2.1 Question 1: Gang prevention

- **Population**: At-risk children (under 19 years of age), with 'at-risk' defined as displaying multiple risk factors from the following five domains: 1) Individual (hyperactivity, lack of guilt/empathy, physical violence/aggression, positive attitude towards delinquency, previous criminal activity); 2) family (family poverty, family violence and abuse, change in primary carer, antisocial parents); 3) school (low academic performance, frequent truancy, early school leaving); 4) peer group (delinquent peers, commitment to delinquent peers, peer rejection); and 5) community (neighbourhood disorganization, exposure to drugs)[34]
- **Intervention**: All studies reporting on a community-based intervention or programme
- **Outcome**: Report a primary outcome related to gang membership status, gang-related delinquent or antisocial behaviour or gang-related criminal activity (arrest or self-report), and include data on the outcome (numerical or textual)
- **Study type**: Systematic reviews, including rapid reviews, rapid evidence appraisals, overviews, with or without meta-analysis
- **Language**: English language
- **Sources**: Both peer-reviewed or grey literature was included subject to meeting minimum quality criteria
- **Geography**: Reviews from other high-income countries were considered eligible.

### 2.2.2 Question 3: Gang desistance

- **Population**: Young people (aged 10–19 years) and young adults (aged 20–29) who have been involved in gangs or gang-related criminal activity
- **Outcome**: Report a primary outcome related to gang exit, desistance, or disengagement from gangs, gang status or gang-related crime, and include data (numerical or textual)
- **Study type**: May include qualitative or quantitative descriptive studies with clear implications for intervention design, intervention studies, and systematic reviews, including rapid reviews, rapid evidence appraisals, and overviews, with or without meta-analysis
- **Language**: English language
- **Sources**: Peer-reviewed literature was considered eligible.

### 2.2.3 Question 4: Gang suppression

- **Population**: Gangs or individuals who are involved in or affiliated with gangs
- **Intervention**: All studies reporting on a community-based intervention or programme (including after-care or post-incarceration rehabilitation programmes delivered in the community), not exclusively prison-based
- **Outcome**: Report a primary outcome related to reducing or preventing gang-related crime or violence including, but not limited to: self-reported arrests, offences, crime rates, homicides, reported incidents, fear of crime, intimidation, and antisocial behaviour, and include data (numerical or textual)
- **Study type**: Systematic reviews, including rapid reviews, rapid evidence appraisals, overviews, with or without meta-analysis and more recent primary intervention studies
- **Language**: English language
- **Sources**: Both peer-reviewed literature and grey literature were included, subject to meeting minimum quality criteria
- **Geography**: Reviews from other high-income countries were considered eligible.

## 2.3 Exclusion criteria

Studies were not excluded *a priori* based on the comparator or outcome measure chosen. Reviews (Q1, Q4) focusing exclusively on low- or middle-income countries were excluded, as the drugs market, criminal justice system and cultural context may limit the relevance of findings to the Irish context.

The main aim of this review is to inform the actions of the Local and Regional Drugs and Alcohol Task Forces in responding to DRI in their communities. These Task Forces comprise representatives from a range of relevant agencies, such as the Health Service Executive, the Gardaí, the Probation and Welfare Service, Education and Training Boards, Local Authorities, the Youth Service, as well as elected public representatives and voluntary and community sector representatives. Thus, we have not considered prison-based interventions (Q3, Q4), nor have we considered legislative actions targeting gangs, drugs, or criminal organizations (Q3, Q4).

## 2.4 Screening process

All 1,251 references (duplicates excluded) identified through the search strategy described above were imported into EPPI-Reviewer for management of the screening process. A two-stage screening process was used to identify relevant studies using the question-specific eligibility criteria above. First, all identified records were screened by title and abstract for potential eligibility by two reviewers (LM, LF) independently. Any disagreements were arbitrated by a third reviewer (JL). In the case of uncertainty after stage one, a record was included for screening in stage two. Second, the full texts of remaining studies were retrieved and screened by question for eligibility by two independent reviewers (Q1 JL and LM; Q3 MK and LM; Q4 BG and LM).

Our emphasis for Q1 was on 'at-risk' children; however, when reading overviews of prevention identified in our initial search, we noted that there were universal early intervention programmes that built life skills and resilience, which can prevent children becoming 'at-risk' at a later date. These were included in the synthesis for completeness. Our review of universal prevention programmes may not be comprehensive, as the search was not designed specifically to identify these; however, based on our reading of the literature we are confident that we have included the main approaches.

Our initial approach to searching and screening for the desistance literature (Q3) was consistent with our approach to the literature on gang prevention and gang suppression; however, through the screening process it became clear that the literature in this area was less developed than the other areas and our approach would need to be reconsidered. Where evaluations of interventions with an outcome of gang exit were identified by searches for any question, as primary studies or included in reviews, these were included in the summary of literature on prevention (indicated prevention) or gang alternatives, depending on the sample's degree of gang involvement. As there were very few robust evaluations of interventions targeting gang exit identified, we used the existing search and broadened our inclusion criteria for this question to include primary studies providing qualitative or quantitative examination of gang desistance or the desistance process for in-depth analysis. The revised question, methodological approach and findings of this in-depth examination of the gang desistance literature are described in Chapter 4.

As detailed in the flow chart below (Figure 3), a total of 1,251 references were screened based on title and abstract, the full text of 136 references was screened and 46 references were retained for the final syntheses. Of these 46 studies, 15 were used to respond to Q1 gang prevention, 21 to respond to Q3 gang desistance, and 11 to respond to Q4 gang suppression.

## Figure 3: PRISMA Flow chart depicting the flow of information through the different stages of the review process

## 2.5 Data extraction

Quantitative data from included studies were extracted using three consistent data extraction forms (Appendix 4). The first provides description of study type, aim, sample, countries, quality appraisal rating, and a brief summary of key findings organized by study reference. The second provides a description of the outcomes considered and relevant findings, organized by intervention model and position within the gang control strategy typology. The third provides a description of the intervention model, a list of prototypical programmes and a summary of their effects with reference to relevant studies, again organized by intervention model and position within the gang control strategy typology. Data extraction for included studies was conducted by one reviewer for each question (Q1 JL; Q3 LM or MK; Q4 BG), with data checked in detail by a second reviewer (Q1, Q4: LM) (Appendix 4).

## 2.6 Quality assessment

Eligible reviews were appraised for methodological quality using the Health Evidence Quality Assessment Tool for Review Articles. This quality appraisal tool was developed specifically for appraising evidence reviews by the McMaster University National Collaborating Centre for Methods and Tools to facilitate evidence-informed decision-making by public health professionals and policy-makers. Reviews were considered to be of high methodological quality if they scored eight or higher on this 10-point scale, of moderate quality if they scored five to seven, or methodologically weak if they scored four or lower.

All other study designs were appraised using the Mixed Methods Appraisal Tool, which was designed for the appraisal stage of systematic reviews that include quantitative, qualitative and mixed methods studies. This tool was chosen for consistency, as it could accommodate all primary study designs of studies identified for Q3 and recent intervention studies identified for Q1 and Q4.

Each study addressing Q1 and Q4 was assessed by two reviewers (JL, BG), while each of those addressing Q3 was appraised by a single reviewer (MK qualitative studies, LM quantitative or mixed methods studies). Table 4 lists the references of included studies for each question according to their assessed level of methodological quality.

Detailed quality appraisals are presented in Appendix 3, while a summary rating appears in Appendix 4.

## Table 4: Included studies by question and quality appraisal

| Quality rating | Q1: Gang prevention | Q3: Gang desistance | Q4: Gang suppression |
|---|---|---|---|
| Low | | | Huey *et al.* (2016)[35] |
| Moderate | National Crime Prevention Centre (2007)[36] | Berger *et al.* (2016)[37] | Braga and Weisburd (2012)[38] Papachristos and Kirk (2015)[39] |
| | O'Connor and Waddell (2015)[40] | Bolden (2013)[41] | Petrosino and Campie (2015)[42] |
| | DuBois *et al.* (2011)[43] | Campbell and Hansen (2012)[44] | |
| | Esbensen *et al.* (2013)*[45] | Carson *et al.* (2013)[46] | |
| | Fisher *et al.* (2008a)[47] | Decker *et al.* (2014)[48] | |
| | Fisher *et al.* (2008b)[49] | Flores (2009)[50] | |
| | Smith-Moncrieffe (2013)[51] | Goodwill and Ishiyama (2016)[52] | |
| | | Halsey *et al.* (2016)[53] | |
| | | Melde *et al.* (2012)[54] | |
| | | Melde and Esbensen (2014)[55] | |
| | | Moloney *et al.* (2009)[56] | |
| | | O'Neal *et al.* (2014)[57] | |
| | | Pyrooz *et al.* (2013)[58] | |
| | | Sogaard *et al.* (2015)[59] | |
| High | Farrington and Welsh (2003)[60] | Abt and Winship (2016)[61]*** | Abt and Winship (2016)[61] |
| | Hennigan *et al.* (2014)[62]** | Deuchar *et al.* (2016)[63] | Campie and Petrosino (2013)[64] |
| | Littell *et al.* (2005)[65] | Gormally (2015)[66] | Corsaro and Engel (2015)[67] |
| | Petrosino *et al.* (2003; 2013)[68] | Nugent and Schinkel (2016)[69] | Hodgkinson *et al.* (2009)[70] |
| | Piquero *et al.* (2008)[71] | Pyrooz *et al.* (2014)[72] | Lipsey (2009)[73] |
| | Piquero *et al.* (2010)[74] | Pyrooz and Decker (2011)[75] | Livingstone *et al.* (2013)[76] |
| | Wilson *et al.* (2005)[77] | Sweeten *et al.* (2013)[78] | |
| | Wong *et al.* (2012)[79] | Weerman *et al.* (2015)[80] | Roo and James (2011)[81] |
| | | Wong *et al.* (2012)[79]*** | |

Notes:

* Esbensen *et al.* (2013) is an intervention study rather than a review – this study was brought forward for inclusion to add clarity given that there was some discrepancy in the findings of reviews, which grouped evaluations of GREAT with the revised version GREAT II.

** Hennigan *et al.* (2014) was identified through initial searches and excluded, as it is not a review; however, it was later brought forward for inclusion, as it provided one example of a risk assessment tool that was considered important for appropriate targeting of indicated prevention by a number of included reviews.

*** Studies identified through initial searching for interventions, but not included in in-depth analysis of primary studies.

## 2.7 Data synthesis

Our approach to data synthesis was driven by the types of studies and interventions identified in the search. The focus of the review questions on gang prevention, intervention and suppression flowed from the conceptual framework described in Chapter 1 Section 1.7, but also follows the traditional approach to describing gang control programmes in terms of prevention, intervention, suppression, and comprehensive strategies.[82] Initial review of the included literature on gang control strategies indicated that even within a particular intervention approach (prevention, intervention, or suppression), there was considerable heterogeneity in the types of activities included, the level of intervention (individuals, groups, communities, institutions), and the outcomes pursued (reductions in delinquency, antisocial behaviour, gang membership, gang-related crime or violence, recidivism). This heterogeneity within categories limited their utility for guiding the synthesis of data on programme effectiveness by intervention approach.

Previous reviews have attempted to combine programmes with similar approaches that are otherwise very diverse, but the conclusions that can be drawn from such syntheses become limited. Moreover, different reviews have classified interventions into different categories and some have classified interventions by their stated aims, while others have classified them by their actual implementation. Gravel and colleagues[83] argue that the field of gang control will not be advanced until, first, the quality and quantity of gang programme evaluations is improved and, second, a unifying framework is developed to allow for systematic comparison among similar types of gang control approaches, so that successes and failures can be identified. They go on to propose a more refined typology of gang control strategies that expands on the traditional typology of prevention, intervention, suppression and comprehensive efforts. This typology, illustrated in Figure 4, takes into account information on the target population (universal, at-risk youth, current gang members), and the activities carried out by the programmes. Specifically, it includes five broad categories of programmes:[83]

1. Prevention, which includes:
   - *Preventive awareness*: targets the general population with the aim of increasing their knowledge and helping them develop skills to avoid risky situations
   - *Gang membership prevention*: targets youth at risk of gang membership, includes assessment of risk prior to inclusion in the programme, and is similar to preventive awareness programmes, but with greater emphasis on risk factors and risky situations.

2. Gang activity regulation, which includes:
   - *Gang alternatives:* targets gang-involved individuals with the aim of reducing the negative impact of gang life on future prospects by supporting individuals to leave their gangs and by providing opportunities outside of the gang to prevent relapse
   - *Gang activity prevention:* targets specific activities of gang members, places where gang members are active, or behaviours associated with gang activity to make it harder to engage in gang-related activities and thereby minimize the impact of gangs on the community
   - *Gang activity suppression:* targets gang members using deterrence-based strategies and sanctions.

3. Corrections-based intervention, which includes:
   - *Prison-based gang interventions:* target gang members within correctional institutions
   - *Probation-based gang interventions:* target gang members on release from correctional institutions.

4. Comprehensive approaches, which include at least one strategy from the prevention category and at least two strategies from the gang activity regulation category, all of which are overseen by a single coordinating entity which organizes service delivery, implementation, and the roles of multiple agencies involved in the project.

5. Holistic approaches, which include at least four strategies from the overall typology, including one from each of the prevention, gang activity regulation, and justice system-based intervention categories.

## Figure 4: Typology of street gang control strategies[83]

This typology proposed by Gravel *et al.* (2013),[83] with minor modification, was used to guide the further classification of interventions identified for inclusion in this review and the narrative synthesis of data from evaluations of these interventions. We felt that gang alternatives could be further subdivided, with one part targeting those who are newly or loosely gang affiliated falling into prevention (indicated prevention or gang-specific prevention approaches) and the other targeting more embedded gang members who are engaged in gang-related crime and violence falling into gang activity regulation (gang alternatives). Interventions identified in the search for Q1 gang prevention were categorized as preventive awareness (universal prevention), gang membership prevention (selected prevention), or indicated prevention. Interventions identified in the search for Q3 gang desistance were categorized as indicated prevention or gang alternatives. Interventions identified in the search for Q4 gang suppression were categorized as gang activity regulation, gang activity suppression, or corrections-based interventions. Interventions which met the criteria for comprehensive or holistic approaches that were identified through any searches were categorized as 'comprehensive' and 'holistic' accordingly. Narrative synthesis of study findings will be presented, with interventions categorized by activity type and approach, as defined above.

# 3 Results

## Question 1: Community-based interventions to prevent entry into gang networks among at-risk children

## 3.1 Prevention

Prevention is different from intervention and suppression in that it is aimed at general population groups with various levels of risk for the problem of interest. The goal of prevention is to reduce risk factors and enhance protective factors, and prevent negative practices (such as antisocial behaviour, delinquency, crime, gang membership) or negative outcomes (imprisonment, assault or murder). Reviews of gang prevention literature[40, 79] identified few interventions directly targeting or impacting gang involvement; however, they included interventions targeting outcomes such as antisocial behaviour, delinquency and crime. Therefore, we have reported on these outcomes, as they can be precursors of gang membership. In addition, early intervention is the key to preventing negative outcomes in later life. The universal, selective and indicated framework can be used to match interventions to the needs of a targeted population. Appendix 1 covers early interventions to prevent drug use initiation, and promote reduction or cessation overlap interventions to prevent antisocial behaviour, delinquency, crime and/or gang membership, as well as interventions to prevent drug use.

### 3.1.1 Community engagement, data sharing and partnership building

Community engagement, data sharing, and partnership building have a role in the prevention of youth violence and gang involvement. O'Connor and Waddell (2015)[40] report that there is a strong, valid argument that community engagement, data sharing, and partnership building between young people, families, schools, communities, and public services can be important in identifying local risk and protective factors, identifying those with the greatest need, and supporting gang and violence prevention efforts. Drug use could also be included here. Despite the argued importance of partnership building and community engagement, O'Connor and Waddell (2015)[40] did not identify any robust evaluations of specific community-based programmes to provide an indication of their effectiveness. This evidence gap has been noted in other reviews. No other prevention reviews examined data sharing and partnership building.

### 3.1.2 Universal prevention programmes (preventive awareness)

Universal prevention programmes target general population groups without reference to those at particular risk. They are based on the assumption that anyone could be at risk given the 'right' set of circumstances and, therefore, all members of a defined population (such as infants, toddlers, pre-school children and school children) would benefit from programmes adopting a universal approach (such as Incredible Years, Strengthening Families, Walk Tall programme, Social, Personal and Health Education, known as SPHE). Parents may

have some involvement in these programmes, such as doing homework with participating children or implementing skills together. These programmes could be school or community based.

## Universal prevention programmes in review

The majority of universal prevention programmes identified in this review are school based, with or without parental involvement, but some are based between home and community.

The main programmes are:

» School curriculum and skills-based programmes, which typically deliver a core curriculum through a series of information and skills-based sessions delivered to whole classes. They are mostly interactive, involving skill demonstrations and skill practice through role play and games.
  - Examples of these include: LifeSkills Training and Positive Action.

» School-wide climate change programmes, which aim to create positive and safe learning environments at a school-wide or classroom level, and to build and encourage positive relationships between the school, parents, students, and the community.
  - Olweus Bullying Prevention Programme is an example of this programme type.

» Classroom management programmes, which aim to reduce aggressive, disruptive, and other behavioural problems, while promoting social and emotional skills (for example, problem-solving, empathy) and a positive learning environment. They equip teachers with methods to manage difficult behaviour and encourage prosocial behaviour among students.
  - Two examples of these programmes are The Good Behaviour Game and Incredible Years: Teacher.

» Parent and/or family training programmes, which aim to equip parents with the knowledge and skills to guide their child, and enhance positive parent—child interactions and family protective factors.
  - Examples include: Strengthening Families Programme, 10–14 and Families and Schools Together.

» Specifically developed programmes, which were designed to deal with drug initiation or use and gang membership in the US
  - Drug Abuse Resistance Education (DARE) is a City of Los Angeles Government substance abuse prevention education programme that seeks to prevent use of controlled drugs, gang membership, and violent behaviour. It was founded in Los Angeles in 1983.
  - Gang Resistance Education And Training (GREAT), which was based on DARE, is a gang and violence prevention programme built around school-based, law enforcement officer-instructed classroom curricula. The programme is intended as an immunization against delinquency, youth violence, and gang membership for children in the years immediately before the prime ages for introduction into gangs and delinquent behaviour.

## Effectiveness of universal prevention programmes

O'Connor and Waddell (2015)[40] identified 27 universal prevention programmes through a search of clearing houses. Twenty-one were judged to be effective and six were judged as ineffective. Collectively, programmes that worked had positive effects on outcomes such as: violent, criminal, and antisocial behaviour, dating violence and abuse, delinquency, conduct problems, fighting, aggression, substance initiation and use, sexual behaviours, problem-solving, and empathy. The key principles of the effective programmes were those with: positive goals, parental involvement, group-based and interactive techniques, trained professional facilitators, manualized content (including intervention fidelity), and regular and frequent delivery of content. The key principles of ineffective programmes were: those with minimal staff input, delivered via computers and where the children had to define their own goals and expectations. The National Crime Prevention Centre's (2007)[36] rapid evidence review alluded to the effectiveness of early intervention and universal prevention programmes to prevent delinquency.

DARE and GREAT I were the only universal prevention programmes presented in the National Crime Prevention Centre review. GREAT I is based on DARE. Klein and Maxson (2006)[82] contend that four basic factors explain the failure of the GREAT I programme: police officers delivered the programme; the programme was based on untested conventional wisdom that attitudinal variables or life skills trigger the attractiveness of

gang membership; the content of the curriculum failed to incorporate the existing knowledge about gangs; and it was not targeted at those most at risk of joining gangs.

Wong and colleagues (2012)[79] assigned five studies to the preventive awareness category. Four of these five studies were evaluations of school-based gang prevention programmes and had measures relating to behaviour. Across the four remaining studies, the only significant treatment effect found was for lower rates of gang membership in the evaluation of the GREAT II programme at year 1.[84]

The Gang Resistance Education And Training programme (GREAT) — Version II is a school-based cognitive behavioural programme for 6th or 7th grade students (aged 12 to 13 years) to prevent gang membership, violence and criminal activity, as well as encourage a positive relationship with police.[45] The revised curriculum is based on two school-based programmes: LifeSkills training and the Seattle Social Development Model. The 13-lesson programme is taught by police officers and supported by teachers. The programme was tested using a randomized controlled trial in 195 classes, in 31 schools, across 7 cities (102 received GREAT and 93 did not receive the programme). The four-year follow-up, which had a 72% retention rate, found that participants were 39% less likely to join a gang at 12 months after the training and 24% less likely to join a gang at 48 months following the training. The loss to follow-up at 48 months was 28% and the authors comment that at-risk youth were more likely to be lost to follow-up than other youth, so the reduction in joining gangs may be an overestimate.[45]

#### Summary of universal prevention programmes

Universal prevention programmes that are based on developing life skills, such as decision-making and problem-solving, can enhance protective factors and reduce risk factors, resulting in less antisocial behaviour and delinquency. The evidence on preventing gang membership, though effective, is from one randomized controlled trial only.

Effective programmes had the following key principles: positive goals, parental involvement, group-based and interactive techniques, trained professional facilitators (in particular, teachers), manualized content (including intervention fidelity), and regular and frequent delivery of content.

### 3.1.3 Selective prevention programmes (gang membership prevention)

Selective programmes target those at higher than average risk of any problem. Targeted populations are identified on the basis of the nature and number of risk factors. Children from low socioeconomic groups, from marginalized populations, with poor parenting, living with foster parents, with difficult behaviours and/or exposed to alcohol and other drugs are examples of at-risk populations. The goal is to prevent the development of serious problems, such as antisocial behaviour, substance use, delinquency, and crime and/or gang membership. Not all at-risk children will go on to be antisocial, use drugs or commit crimes, but it is difficult at an early age to identify those who will, and so the intervention is provided to the at-risk population as a whole. Some examples of selective programmes are:

- Family Nurse Partnership
- Incredible Years Parenting Programme and/or Small Group Dinosaur Curriculum
- Triple P Positive Parenting Programme Level 2 and 3
- Parent Child Interaction Therapy for parents and guardians
- Schools and Families Educating Children
- Reconnecting Youth – A Peer Group Approach to Building Life Skills.

These programmes require parental participation.

#### Selective prevention programmes in review

There are a number of categories of selective prevention programmes:

- Parent skills-based programmes for at-risk children aged 0–3 years:
  - Two commonly used and widely recognized approaches, particularly in relation to younger children, are home visiting programmes and parent training programmes; the latter are sometimes completed in a group approach. These programmes work through strengthening relationships between children and their parents/carers and helping parents develop effective responses to children's negative behaviour. Such programmes can have immediate impacts on child behaviour and parenting practices.

- Parent and/or child skills-based programmes targeting at-risk children tended to be school based and/or family focused. Occasionally, they are family and community focused:
  - Programmes involve demonstrations, practice and activities that aim to develop young people's abilities to control their behaviour and/or participate in prosocial activities. These programmes all aim to prevent, delay, or reduce risk factors and negative outcomes, as well as improve skills and enhance positive outcomes. Most of the programmes are delivered with small groups of children or young people who have been referred by a professional because they are displaying concerning behaviour.
  - Cognitive behavioural interventions are based on the principle that thinking (an internal behaviour) controls overt actions (external behaviour). Therefore, through cognitive behavioural interventions (or curricula), at-risk populations learn new skills and new ways of thinking that can lead to changes in their behaviour and actions, and ultimately affect their conduct. Cognitive behavioural interventions use a combination of approaches to increase attendees' awareness of self and others. This awareness is coupled with the teaching of social skills to assist the attendees with intrapersonal and interpersonal problems. In other words, these specific types of intervention programmes assist attendees in restructuring the thought process and teach cognitive skills to assist in basic decision-making and problem-solving.
  - Self-control is the ability to control impulses and reactions, and is another name for self-discipline. Self-control is vital for overcoming obsessions, fears, addictions, and any kind of unsuitable behaviour. It puts the attendees in control of their life, their behaviour, and their reactions. Self-control improvement programmes provide strategies to deal with impulses and triggers.

- Youth mentoring:
  - In the conceptual model of youth mentoring, it is essential first and foremost for a strong and meaningful personal connection to be forged between the young person and the mentor. This assumption is in line with research that underscores the benefits of being emotionally attuned and it supports youth relationships with parents, teachers, and others, including mentors who are assigned to work with youth through programmes. A close connection, however, frequently may be the by-product, not the focus, of effective mentoring relationships for young persons. Youth, for example, often may come to trust and appreciate their mentors in the context of working with them on goal-oriented tasks. Some evidence, in fact, suggests that it may be of limited value or even counterproductive for mentors to regard cultivating an emotional connection with a youth as the primary goal, or similarly, to foster relationships that are unconditionally supportive and lacking in structure. Examples include: Big Brothers Big Sisters Community-Based Mentoring and Joven Noble.

- Education and employment opportunities provision:
  - Opportunities provision is a commonly used gang prevention strategy based on anomie and strain theories and the belief that giving youth educational and employment opportunities, such as tutoring or job training and placement, will reduce gang entry and involvement.

- Sports programmes:
  - Sports programmes in the community aim to engage youth in prosocial activities and increase self-esteem. They aim to provide opportunities for youth to engage in supervised prosocial activities, learn new skills, build their self-esteem, and develop trust between youth, schools, police, and communities.

- Deterrence and discipline-based approaches:
  - These approaches aim to deter youth from criminal behaviour through scare tactics and militaristic approaches. Programmes such as 'Scared Straight' involve organized visits to prison facilities by juvenile delinquents or children at risk of becoming delinquent. The programmes are designed to deter participants from future offending by providing first-hand observations of prison life and interaction with adult inmates.
  - In the typical correctional boot camp, participants are required to follow a rigorous daily schedule of activities, including drill and ceremony and physical training, similar to that of a military boot camp. Punishment for misbehaviour is immediate and swift and usually involves some type of physical activity such as push-ups. Boot camps differ substantially in the amount of focus given

to the physical training and hard labour aspects of the programme versus therapeutic programming, such as academic education, drug treatment or cognitive skills.

## Effectiveness of selective prevention programmes

O'Connor and Waddell (2015)[40] identified 25 clearing house programmes that provide intervention for at-risk children. Of these programmes 19 were deemed promising and six were deemed ineffective.

### *Effectiveness: parent skills-based programmes for at-risk children aged 0–3 years*

O'Connor and Waddell (2015)[40] argue that there is good evidence to suggest that interventions which develop parenting skills, which support families, and which strengthen relationships between children and their parents/carers have immediate impacts on child behaviour and parenting practices. However, research on long-term outcomes, such as young people's risk of involvement in future antisocial behaviour, delinquency, and crime, was more limited. Intervention fidelity and interactive or real-life examples were key principles of effective interventions; the corollary was true for ineffective interventions.

Farrington and Welsh (2003)[60] calculated effect sizes for delinquency outcomes when the target children were adolescents or adults as described in two studies (Olds *et al.,* 1998; Reynolds *et al*., 2001). The intervention was based on nurse visiting or nursery-based parent training while the target child was aged between 0 and 3 years. Data on long-term outcomes were not included in the meta-analysis but were analysed separately. The authors found a long-term effect size of 0.54 (medium effect) for arrests in the Olds *et al*. study and 0.28 (small to medium effect) for the same outcome for the Reynolds *et al*. study. These are the only long-term outcome data available.

Piquero *et al.* (2008)[71] found that early family/parent training is an effective intervention for reducing short-term behavioural problems among young at-risk children. The weighted effect size was 0.35 approximately (or small to medium effect), corresponding to 50% recidivism in the control group compared with 33% recidivism in the experimental group. The results also demonstrated that there were significant differences in the effect sizes of studies conducted in the US versus those conducted in other countries, and that studies which were based on samples smaller than 100 children had larger effect sizes. Sample size was also the strongest predictor of the variation in the effect sizes. Piquero *et al.* (2008)[71] completed a narrative analysis of the long-term delinquency outcomes and concluded that, overall, family and parent training for at-risk parents reduced their children's level of delinquency in adolescence and crime in adulthood.

### *Effectiveness: parent and/or child skills-based programmes targeting at-risk school-aged children*

O'Connor and Waddell (2015)[40] found there was a strong argument that the most effective and well-evidenced approaches tended to have 'therapeutic' principles, meaning they aimed to create positive changes in the lives of young people and/or their families, as well as prevent negative outcomes. This included, for example, skills-based, parent-/family-focused, and therapy-based programmes. Overall, skills-based interventions had a statistically significant, small- to medium-sized effect in reducing child behavioural problems. This was true for both home visiting and parent training programmes, which had similar small effects on child behaviour. These effects were significantly larger for studies conducted in the US compared to those conducted in other countries such as the UK, Australia, and Canada. The principles of potentially effective selective programmes were: positive goals, involvement of schools and parents, interactive and real-life examples, manualized approach, professional facilitators, regular contact and high implementation fidelity.

Fisher and colleagues (2008a)[47] found no evidence from randomized controlled trials or quasi-experimental studies regarding the effectiveness of cognitive behavioural interventions for gang prevention. However, according to the research quoted in Fisher *et al.* (2008a),[47] cognitive behavioural programmes can reduce antisocial behaviour and delinquency.

Piquero *et al.'s* (2008)[71] findings on early family/parent training for reducing short-term behavioural problems also applies to school-aged children.

Piquero *et al.* (2010)[74] found that self-control improvement programmes were an effective intervention for improving self-control and reducing delinquency and problem behaviours up to the age of 10 (considered short-term effects), and that the effect of these programmes appears to be robust across various weighting procedures, and across context, outcome source, and based on both published and unpublished data. The authors conclude that self-control improvement programmes should continue to be used to improve self-control and reduce delinquency and behavioural problems up to age 10, which is the age cut-off where Gottfredson and Hirschi (1995)[85] argue that self-control becomes relatively fixed and no longer malleable.

### *Effectiveness: youth mentoring*

O'Connor and Waddell (2015)[40] found that initial evidence suggested mentoring can have beneficial effects, programmes can vary substantially and, on the whole, knowledge about 'what works' is limited and predominantly from the US. Looking at high-risk youth, Lipsey's (2009)[73] meta-analytic overview of studies with control groups found that mentoring interventions for young offenders were associated with a 21% reduction in recidivism. In a rapid evidence assessment of the effects of mentoring for individuals at risk of offending or being apprehended by the police, mentoring was associated with a reduction of between 4% and 11% in subsequent offending.[86] For children and young people more generally, one systematic review and meta-analysis of randomized and quasi-experimental designs with control/comparison groups found mentoring to have small positive effects across behavioural, social, emotional, and academic domains.[43]

DuBois *et al.* (2011),[43] one of the reviews examined by O'Connor and Waddell (2015),[40] found that mentoring has a small but positive effect on conduct problems (0.21, 0.11–0.31). Several other aspects of DuBois' findings, according to the author, underscore a need for caution. These include a failure of evaluations to assess several key outcomes of policy interest (e.g., juvenile offending, obesity prevention) or to determine whether benefits for youth are sustained at later points in their development.

### *Effectiveness: education and employment opportunities provision*

Fisher *et al.* (2008b)[49] found no existing evidence from randomized controlled trials or quasi-experimental studies regarding the effectiveness of opportunities provision for gang prevention. Rigorous primary evaluations of gang prevention strategies are crucial to develop this research field, justify funding of existing interventions, and guide future gang prevention programmes and policies.

### *Effectiveness: sports programmes*

O'Connor and Waddell (2015)[40] found that while there was initial evidence to suggest that sports programmes may reduce youth crime and violence, this largely came from studies using weak evaluation designs. The evidence was interesting as a broad and preliminary indication of possible effectiveness, but because most of the studies had small sample sizes and lacked control groups, it was difficult to determine whether these sports-based programmes genuinely caused the outcomes measured, and so the findings should not be overstated.

### *Effectiveness: deterrence and discipline-based approaches*

O'Connor and Waddell (2015)[40] report that robust reviews and studies have shown that approaches to preventing youth crime and violence based on deterrence and/or discipline are ineffective and may even exacerbate the problem, particularly for young people who are at risk or are already involved in delinquency and offending.

Petrosino and colleagues (2013)[68] conclude that programmes such as 'Scared Straight', a prison visiting programme, are likely to have a harmful effect and increase delinquency among youths relative to doing nothing at all. Given these results, the authors cannot recommend this programme as a crime prevention strategy.

The current evidence from a systematic review by Wilson (2005)[77] suggests that boot camps are not effective in reducing subsequent offending.

## Summary of selective prevention programmes

Parent skills-based prevention programmes for at-risk children aged 0–3 years show that there is good evidence to suggest that interventions which develop parenting skills, support families, and strengthen relationships between children and their parents/carers have immediate short-

term impacts on child behaviour and parenting practices. Two narrative analyses of the long-term delinquency outcomes concluded that, overall, family and parent training for at-risk parents reduced their children's level of delinquency in adolescence and crime in adulthood. Intervention fidelity and interactive or real-life examples were key principles of effective interventions.

Overall, skills-based therapeutic interventions for school-aged children from at-risk populations had a small- to medium-sized effect in reducing child behavioural problems. This was true for both home visiting and parent training programmes, which had similar small effects on child behaviour. The principles of potentially effective selective programmes were: positive goals, involvement of schools and parents, interactive and real-life examples, a manualized approach with implementation fidelity, professional facilitators, and regular contact.

One review found that self-control improvement programmes were an effective intervention for improving self-control and reducing delinquency and problem behaviours up to the age of 10 (short-term effect).

Evidence suggested that mentoring can have small beneficial effects on conduct and recidivism; however, programmes vary substantially and are predominantly based in the US.

There is no evidence regarding the effect of education and employment opportunities on gang membership.

There is weak evidence to demonstrate that sports programmes may reduce youth crime.

Robust reviews and studies have shown that approaches to preventing youth crime and violence based on deterrence (prison visits) and/or discipline (boot camps) are ineffective and may be harmful.

### 3.1.4 Indicated prevention programmes

Indicated programmes target those individuals already engaged in high-risk behaviours, such as opposition behaviour, conduct disorder, antisocial behaviour, substance use and/or delinquency to prevent severe problems, such as gang membership, gang embeddedness and/or criminal activity. Generally, these programmes are provided by a therapist and aim to reduce problem behaviours in young people and improve family functioning. These programmes are usually provided to both the child and parents, and often other family members are included. The programmes are often implemented through home visiting, as it improves attendance and provides the therapist with a more realistic view of the risk and protective factors at home. Examples of these programmes are:

- Functional Family Therapy
- Multidimensional Family Therapy
- Multidimensional Treatment Foster Care – Adolescent
- Multisystemic Therapy
- Wraparound projects.

#### Indicated prevention programmes in review

***Therapeutic approaches***

- Family-focused therapy-based programmes aim to reduce problem behaviours in young people and improve family functioning. They work with the young person and their family to equip the family as a whole to tackle the problems faced by the young person and sustain positive changes. The therapist may also take into account wider risk factors, such as the influence of deviant peer groups, and liaise with other services and the young person's school.
  - Examples of these programmes are: Functional Family Therapy; Multidimensional Family Therapy; Multidimensional Treatment Foster Care – Adolescent Multisystemic Therapy.

- Trauma-focused, therapy-based programmes aim to reduce the symptoms of post-traumatic stress disorder (PTSD) or the emotional and/or behavioural problems associated with exposure to traumatic life events, and to increase positive functioning and improve coping skills. They primarily work with the young person in individual or group sessions. Therapy is structured around key cognitive behavioural therapy techniques (e.g., psychoeducation, relaxation skills, exposure), helping the young person to process and manage their traumatic memories and be better equipped to deal with stresses in the future.
  - Examples of these programmes are: Multisystemic Therapy for Youth with Problem Sexual Behaviours and Trauma-Focused Cognitive Behavioural Therapy.

### *Gang-specific approaches*

Gang-specific approaches aim to prevent young people from becoming involved in gangs and to help them find ways out before they become embedded if they do become involved. The Wraparound city programmes are an example of such approaches.

» Wraparound Milwaukee is one of many examples of the wraparound approach. It is a community-based, highly individualized system of care, which serves children and youth with serious emotional, behavioural and mental health needs, and their families. The basic philosophy underlying this approach is to identify precisely the community services and supports that a family needs, and to provide them as long as they are needed. Project Wraparound has been implemented in many different sectors, including: child welfare, education, juvenile justice, and mental health. This wraparound approach is based on an identification of the services families really need to care for a child with specific needs. It identifies the personal, community, and professional resources to meet those needs, and it wraps those services around the child and family. Youths can be referred to the programme by probation officers or child welfare workers. The programme targets children who meet the following criteria:
  - They have a current mental health problem identified through an assessment tool.
  - They are involved in two or more service systems, including mental health, child welfare, or juvenile justice.
  - They have been identified for out-of-home placements in a residential treatment centre.
  - They could be returned home sooner from such a facility with the availability of a wraparound plan and services.

## Effectiveness of indicated prevention programmes

### *Effectiveness: therapeutic approaches*

O'Connor and Waddell (2015)[40] identified 15 clearing house programmes that provide intervention for high-risk children; 14 were deemed effective and one was deemed ineffective. The authors found that there is a strong argument that the most effective and well-evidenced approaches tend to have 'therapeutic' principles, meaning they aim to create positive changes in the lives of young people and/or their families, as well as prevent negative outcomes. This includes, for example, skills-based, parent-/family-focused, and therapy-based programmes. Multisystemic Therapy and parent training (compared to no intervention) are the most effective therapeutic methods for dealing with high-risk children. The authors also found that the least effective were school-based approaches, which failed to have a statistically significant impact. The key principles of effective programmes were: structured and tailored programmes, family engagement, prevention of recurrent negative outcomes, trained professional facilitators (usually therapists or mental health professionals), delivery in the home, regular and frequent contact and high implementation fidelity. One-off sessions or computer-based sessions were ineffective.

Fisher *et al.* (2008a)[47] found no existing evidence from randomized controlled trials or quasi-experimental studies regarding the effectiveness of cognitive behavioural interventions for gang prevention.

The National Crime Prevention Centre in Canada (2007)[36] classified Multisystemic Therapy as an example of best practice to prevent or reduce delinquency measured by reductions in the levels of re-arrest and out-of-home placement. They also argue it is possible that it improves family functioning and decreases mental health issues.

Littell and colleagues (2005)[65] examined outcome measures, including archival data (police and court records) on arrests and/or convictions for criminal offences and incarceration in studies of juvenile offenders in the US and Canada. Measures of behavioural, psychosocial, and family outcomes were examined. Behavioural outcomes included: antisocial behaviour (as measured by arrest or conviction of a criminal offence), drug use (self-reports and drug tests), and school attendance. The most rigorous (intention-to-treat) analysis found no significant differences between Multisystemic Therapy and usual services in restrictive out-of-home placements and arrests or convictions. Pooled results that include studies with data of varying quality tend to favour Multisystemic Therapy, but these relative effects are not significantly different from zero. The study sample size was small and effects were not consistent across studies; therefore, it was not clear whether Multisystemic Therapy has clinically significant advantages over other services. At the time of publication (June 2017), this review was being updated.

### *Effectiveness: gang-specific approaches*

O'Connor and Waddell (2015)[40] reported that there was a range of strategies and interventions being used to try and prevent young people from becoming involved in gangs and to help them find ways out before they become embedded if they do become involved; however, there is a lack of robust, high-quality evidence on whether these approaches work.

In Wong *et al*. (2012),[79] none of the assessments of single treatment (selective prevention) programme effects on delinquency outcomes demonstrated a significant reduction in gang-joining behaviours. Across the five gang membership prevention programme evaluations, no significant treatment effects were found for gang membership or arrests. The only other significant effect seen across the gang membership prevention programmes was a lower rate of gang involvement found in the evaluation of the Logan Square Prevention project, a comprehensive programme.[87] The Logan Square Prevention project involved a coalition of agencies providing school- and community-based prevention services to youths with a focus on reducing substance use and gang involvement.

The National Crime Prevention Centre in Canada (2007)[36] reported that several studies have demonstrated the effectiveness of the Wraparound approach. For example, two randomized controlled trials, conducted in New York and Florida, showed favourable results for children and youth participating in the wraparound process. There were, for example, decreases in behavioural symptoms, thought problems, and rates of delinquency.

Smith-Moncrieffe (2013)[51] reported that six of the 10 evaluations supported by the Youth Gang Prevention Fund in Canada measured behaviour-related outcomes. Four of these six studies (67%) reported results that indicate positive change in at least one behavioural outcome. Behaviours assessed include police contact, violent and non-violent offending and gang involvement. Gang involvement, police contact and non-violent offending behaviour such as theft and selling illegal drugs were the most likely outcomes to be reduced. Violent offending was less likely to be reduced, as most youths in these gang prevention projects did not have a violent offending history.

Smith-Moncrieffe (2013)[51] reported that the Gang Prevention Strategy (Violent Offending) resulted in a statistically significant reduction (22%) in the youth committing physical assaults by the end of the programme.

Smith-Moncrieffe (2013)[51] reported that by the end of the Youth Advocate Programme, the youth showed a decrease in delinquency and conduct problems. Reductions in victimization were significant, with a moderate effect size (0.55). In the same report the Surrey Wraparound project showed a significant decline (67%) in police contacts relative to the comparison group.

Gang exit (also known as the gang membership variable) was a key measure in the Youth Gang Prevention Fund projects. Smith-Moncrieffe (2013)[51] reported that most of the 10 projects targeted both youth at risk of gang involvement and gang-involved youth. The gang exit findings suggest that four projects were able to measure the gang exit rate at the end of the programme, and 41–67% of the youth were no longer gang involved by the end of the project. In some projects the evaluators were able to measure the gang exit rate beyond the post-programme period. One project (Regina Anti-Gang Services) had 100% of its participants involved in gangs and by the final follow-up stage (approximately 12 months post-programme) it had 71% of its participants exit their respective gangs. Similarly, evaluators found that 100% of the youth in another project (Youth Alliance Against Gang Violence) had exited their respective gangs by the final follow-up measure (approximately 12 months post programme). Caution should be urged in attributing the high gang exit rate to these programmes alone, as evidence suggests that most youths will remain gang involved for a short time and will end involvement without intervention. Based on review of the desistance literature, Carson and Vecchio (2015)[88] contend that gang membership is a temporary phenomenon for most young people, generally lasting one year or less. Pyrooz *et al* (2013)[58] contend that interventions should focus on reducing the length of gang involvement to prevent gang members from becoming embedded, as embeddedness delays desistance and increases the risk of escalating criminal involvement and victimization.

### Summary of indicated prevention programmes

There is a strong argument from review of clearing house interventions that the most effective and well-evidenced approaches tend to have 'therapeutic' principles, meaning they aim to create positive changes in the lives of young people and/or their families, as well as prevent negative outcomes through group or individual therapeutic interventions. However, earlier systematic reviews do not support this finding, but it seems later interventions were more successful. Some authors attribute lower success rates to inappropriate referrals to these therapies. More up-to-date systematic reviews are required.

There is some limited evidence from small studies in the US and Canada that gang prevention programmes reduced gang entry and facilitated gang exit.

### 3.1.5 Identifying high-risk youth for gang prevention programmes

There is suggestion in the literature that therapeutic interventions may be more effective for high-risk individuals and of limited value to those at lower risk.[62, 73, 79] The inclusion of those at lower risk in evaluations may have diluted the effect size estimates. Hennigan and colleagues (2014)[62] acknowledged the need for identification of high-risk youth to facilitate appropriate targeting of interventions, and developed a tool for assessing risk status to identify youth at high risk of gang joining.[3] They identified risk factors for gang entry through a systematic literature review and they found that the following factors increase the risk of gang entry:

- Cumulative exposure to stressful life events
- Non-delinquent problem behaviours
- Delinquent beliefs
- Poor parental supervision
- Affective dimensions of peer networks
- Characteristics of peer networks
- Early delinquent behaviour.

Hennigan and colleagues (2014)[62] then identified the best measurement tools for each of the risk factors and these were:

- Goodman Strengths and Difficulties Questionnaire for antisocial tendencies
- Grasmick *et al*. general measure of self-control of impulses
- Esbensen and Osgood scale to measure delinquent beliefs
- Esbensen and Osgood scale to measure parental monitoring
- Esbensen and Osgood scale to measure peer influence
- Esbensen and Osgood scale to measure peer delinquency.

The authors[62] developed and tested a Gang Risk of Entry Factors questionnaire and applied calibrated cut-off points using participants from a gang prevention project. The authors report that the findings confirm the assessment's effectiveness in prospectively identifying the youth most likely to join a gang within impacted communities. In the study sample, 100% of the boys who reported current gang membership, 81% of the boys who reported former gang membership, and 74% of the boys who reported hanging out with the gang at the post-test had been identified as high risk (score >75th percentile) 12 to 18 months earlier on the baseline assessment. All but one of the 14 girls (93%) in the study who reported any gang involvement (including just hanging out) on the post-test had been assessed as high risk on the baseline interview.

## Question 2: Community-based interventions to prevent drug use among at-risk young people

A brief synopsis of recent systematic reviews on community prevention of drug use is presented in Appendix 1. This is relevant to preventing young people from becoming victims of drug-related or drug debt intimidation, and preventing young people from being drawn into gang-related crime in repayment for drug debts.

3 Hennigan *et al*. (2014) was identified through systematic searches and was initially excluded, as it is not a review; however, it was later brought forward for inclusion as it provided one example of a validated risk assessment tool that was considered important for appropriate targeting of indicated prevention by a number of included reviews. However, this is an example of one available tool, rather than a tool the review team is recommending.

## Question 3: Community-based interventions to promote gang desistance among young people

## 3.2 Gang alternatives

Gang alternatives interventions target gang-involved individuals with the aim of minimizing the impact of their gang involvement on their future prospects of a law-abiding and productive life.[83] The objective of interventions in this approach is to motivate individuals to leave their gang life behind, support them in doing so, and create opportunities for meaningful occupation outside of the gang. Intervention types included in this approach are education and vocational training, job placement, and outreach.

### Gang alternatives interventions in review

Five interventions identified by Wong *et al*. (2012)[79] as gang alternatives interventions are included in this review. All five of these interventions involved targeted outreach, three involved social skills training, three involved education, and three involved employment support (job training or assistance in finding employment). Targeted outreach involves outreach workers targeting known gang members in specific troubled neighbourhoods, encouraging them to attend a programme or access services. The support services may include counselling, social skills training, or support to access education or employment. One of these programmes focused exclusively on supporting gang members to seek employment by providing them with job leads and information on the local job market.

» Examples of gang alternatives interventions include: Gang Intervention Through Targeted Outreach (GITTO); San Antonio Gang Rehabilitation, Assessment and Support Programme; the San Diego Street Youth Programme, Gang Employment Programme, and Aggression Replacement Training.

### Effectiveness of gang alternatives interventions

Each of these interventions was evaluated by a single quasi-experimental study in a particular setting, representing very limited evidence. In all except one methodologically limited quasi-experimental study the findings suggested that these interventions had no discernible impact on gang membership or gang-related crime or violence.

### Summary of gang alternatives interventions

There are no known gang alternatives programmes with rigorous evaluations that have been found to facilitate desistance from gangs or gang-related crime. These findings are consistent with the findings of leading authors in the gang desistance literature.[89] Pyrooz, Decker and Webb (2014)[72] argue that 'desistance is an understudied phenomenon in the gang literature'. As Klein and Maxson (2006)[82] pointed out, 'surprisingly little research has been conducted on gang desistance and the processes of leaving gangs' (p. 154). 'At this point [2010], we do not know much more about gang desistance than when Klein (1971) first called attention to the issue' (p. 2). Given this evidence gap and the relative importance of desistance from gangs and gang-related crime expressed by Drugs and Alcohol Task Force representatives, we revised our approach to the gang desistance literature. An in-depth analysis of primary studies exploring gang desistance is presented later in Chapter 4.

## Question 4: Community and/or criminal justice approaches to deter or suppress gang-related crime and/or violence

## 3.3 Gang activity prevention

Gang activity prevention shifts the focus from individual gang members to their activities and seeks to minimize the impact of these activities on the communities in which gangs operate.[83] These interventions target specific activities, places, or behaviours associated with gang activity and typically include special laws, mediation and situational prevention strategies. These interventions aim to deter gang-related crime and violence by making it harder to engage in these activities.

## Gang activity prevention interventions in review

Gravel *et al*. (2013)[83] identified seven evaluations of interventions, which they classified as gang activity prevention, while Abt and Winship (2016)[61] identified three additional intervention areas that could be considered relevant within this category. These interventions may target activities (loitering, gun carrying, open drug dealing), places (environmental design, regeneration, barriers, saturation patrols, building laws, community surveillance), or specific behaviours (truancy, breaking curfew).

The main intervention types are:

- Street outreach – conflict resolution/mediation interventions, which are designed to direct and support young offenders during their transition from a correctional facility to the community. The aim of these programmes is to mediate conflicts, gather intelligence and prevent group conflict before it escalates to serious violence.
  - Some examples of these include: Crisis Intervention Services Project (CRISP), One Vision One Life, Little Village Gang Violence Reduction Project (a programme intended to be comprehensive, but implementation focused only on street outreach)

- Civil gang injunctions, which are court orders that may contain a range of positive requirements or prohibit a gang and its members from committing certain acts in specified areas. Sanctions for non-compliance range from fines to criminal penalties. The prohibited acts may be behaviours that would ordinarily be considered criminal (i.e. drug possession and sale, vandalism, trespassing), or those that are considered criminal only because of their occurrence within the gang context and the recognition of the gang as a public nuisance. The aim of these injunctions is to restore order within a community and reduce threats related to gang behaviours and gang violence, to prevent acts of serious violence from occurring, to break down gang culture and prevent younger gang members' behaviour from escalating, and to provide an opportunity for local agencies to engage with gang members and develop effective strategies for them to exit the gang.
  - Examples include: Los Angeles County Civil Gang Injunctions, and San Bernardino Civil Gang Injunction. These are widely implemented in the US, with over 150 in the state of California alone. They have been available since January 2011 in the UK.

- Environmental interventions, which aim to discourage or deter gang activities through manipulation of design features of the physical environment in gang active areas.
  - Examples include: urban renewal, crime prevention through environmental design (CPTED), and Operation Cul de Sac (street barriers to prevent violence).

- Community surveillance, which aims to deter gang activity through increased surveillance in gang active areas.
  - Examples include: Neighbourhood Watch (engages community residents to increase surveillance), and saturation patrols.

## Effectiveness of gang activity prevention interventions

For most of these intervention types, the evidence is modest and showed no discernible or modest effects. For example, Wong *et al*. (2012)[79] reviewed seven intervention evaluations and for most of the outcomes assessed that there were no significant impacts. For street outreach interventions, the Crisis Intervention Project was the only intervention to demonstrate some promise, with reductions in gang-related violence and property crime in intervention areas relative to comparison areas observed in one evaluation in one context.

Gravel *et al*. (2013)[83] identified two evaluations of civil gang injunctions. First, Grogger (2002)[90] studied the association between civil gang injunctions and violent crimes and property crimes and found that they reduced violent crimes in targeted areas, with no evidence of a spillover effect to adjunct areas. Similarly, Maxson, Hennigan and Sloane (2003; 2005)[91, 92] and Maxson *et al*. (2004)[93] found civil gang injunctions to have immediate impacts on the communities' perceptions of gang visibility, fear and intimidation, with no evidence of sustained impacts and some concomitant increases in adjunct areas. More recently, caution has been urged that injunctions should focus specifically on individuals rather than gangs as a unit to prevent increases in gang cohesion.[94]

There was modest evidence of a modest impact of environmental design interventions. For example, a review of five evaluations, including one randomized controlled trial, suggesting that urban renewal was associated with reduced crime and improved police legitimacy and collective efficacy.[61, 95] The review by Wong *et al.* (2012)[79] suggested that Operation Cul de Sac, which involved the strategic implementation of street barriers in areas with high rates of gang-related crime and violence to prevent the mobility of offenders limiting the routes to and from crimes, showed promising reductions in violent crimes when the programme was in place, and increases in violent crimes when the programme ended, with no change in comparison areas. There is moderate evidence, based on three reviews, of only modest, if any, impact of crime prevention through environmental design on crime and violence; however, there was also evidence that this intervention unintentionally reduced collective efficacy by encouraging residents to withdraw from community engagement.[61, 95-97]

Lastly, according to Abt and Winship (2016),[61] there was modest evidence of a small impact of Neighbourhood Watch programmes on crime and violence.

### Summary of gang activity prevention interventions

Evidence regarding the effectiveness of gang activity prevention interventions is limited, in quantity and quality, and shows only modest, if any, impact on crime and violence. The most promising interventions in this category are carefully crafted civil gang injunctions and environmental design interventions such as the implementation of street barriers in high crime areas and urban renewal efforts, with the latter having positive impacts on crime, while improving police legitimacy and communities' sense of control and cohesion.

## 3.4 Gang activity suppression

Gang activity suppression interventions target gang members using deterrence-based strategies.[83] Suppression approaches are more narrowly defined and focused than prevention or intervention strategies. These strategies typically involve intelligence gathering, policing and enforcement strategies, and special prosecution provisions to ensure timely and severe sanctions for gang-related crime. At the individual level, the goal of suppression activities is to arrest, prosecute and incarcerate gang members, while at the group level the goal is to reduce gang size and interrupt gang-level crime, such as inter-gang violence or drug sales.[82]

### Gang activity suppression interventions in review

The main intervention types are:

» 'Pulling levers' focused deterrence interventions, which tend to have the following basic framework. First, a particular crime problem is selected, such as gun violence or on-street drug dealing. Then an interagency group is formed, typically including police, probation, parole, prosecutors, and other enforcement agencies. Key offenders or groups of offenders and the context of their behaviour are identified, either using a data-driven approach or relying on the field experience of front-line police officers. A special enforcement operation is designed using any and all legal tools (levers) to sanction groups who commit the particular offence (i.e. gun violence or on-street drug dealing). Enforcement operations are complemented by parallel efforts to direct services and support to the same offenders and groups. Then the interagency group communicates directly to identified individuals and/or groups that they are under particular scrutiny, that particular acts (gun violence, on-street drug dealing) will get special attention, offenders will be sanctioned as quickly, as publicly and as severely as legally possible ('every lever will be pulled'), and how identified individuals can avoid enforcement action. Some programmes also include concurrent public health/media campaigns (Operation Ceasefire Chicago), and community service and resident engagement in the interagency group to identify the issue and offenders of interest and provide complementary support services (Operation Ceasefire Boston, Operation Peacekeeper Stockton, Operation Ceasefire Chicago, and Project Safe Neighbourhoods).
  - Examples include: Operation Ceasefire, the Indianapolis Violence Reduction Programme, Operation Peacekeeper, Project Safe Neighbourhoods, the Cincinnati Initiative to Reduce Violence, and Drug Market Intervention.

» Policing strategies, which can be place based (hot spots policing, disorder (broken window)) policing, community policing) or behaviour based (problem-oriented policing) approaches. Hot spots policing focuses on small geographic areas where crime is concentrated. Disorder policing addresses physical and social disorder in neighbourhoods to prevent crime and violence; community policing leverages partnerships with residents and community to reduce crime and disorder; and problem-oriented policing uses analysis to tailor police responses to specific public safety problems using the scanning, analysis, response, assessment approach.[61]

» Targeted law enforcement, which involves the direction of additional resources to the enforcement of particular laws relating to a problem of interest; for example, gun or drug law enforcement. Targeted enforcement involves the targeted enforcement of specified laws through hot spots policing of problem areas with high rates of offending, the use of 'special issue courts' to speed up processing of relevant offenders, enhanced probationary supervision of relevant offenders, federal prosecution of relevant offenders, or community interventions involving partnerships to coordinate federal and state resources with local agencies to tackle the problem from all sides.[61, 98, 99]
  - Examples of targeted gun enforcement programmes include: Project Safe Neighbourhoods, Detroit's Handgun Intervention Program, Philadelphia's Youth Violence Reduction Partnership, Richmond Virginia's Project Exile, Partnerships to Reduce Juvenile Gun Violence (OJJDP), Operation Eiger, and Operation Ceasefire.

## Effectiveness of gang activity suppression interventions

Of all the suppression interventions reviewed by Abt and Winship (2016),[61] 'pulling levers' focused deterrence had the largest direct impact on crime and violence. There is moderate evidence, based on 11 evaluations using quasi-experimental designs, that these strategies are associated with an overall statistically significant medium-sized crime reduction effect.[38, 61, 64, 79] Since the publication of the review by Abt and Winship (2016),[61] Corsaro and Engel (2015)[67] reported another successful evaluation of the 'pulling levers' focused deterrence strategy. They evaluated the implementation of this strategy in New Orleans, a city with a high homicide rate, and found statistically significant reductions exceeding changes seen in other comparable cities with high rates of lethal violence.[67] The greatest changes in targeted outcomes were seen in gang homicides. The authors conclude that focused deterrence is a 'promising violence prevention approach in urban contexts with persistent histories of lethal violence, heightened disadvantage, and undermined police' (p. 472). The authors attribute successful implementation of the intervention to the following factors: a multi-agency task force, strong political support, a programme manager and intelligence analyst, a detailed data-driven analysis of the problem, and the integration of research to identify the highest risk groups of offenders.[67]

The different policing strategies reviewed by Abt and Winship (2016)[61] all had modest or no impact. Hot spots policing and disorder policing both had strong evidence, based on systematic reviews of evaluations, including randomized controlled trials, of a modest impact on crime and violence. Specifically, results for hot spots policing ranged from no difference to a 33% reduction in crime and violence. The authors suggest that focusing policing efforts on micro-locations yields positive benefits and crime is not displaced to adjunct areas; rather, these areas also experience crime reduction effects.[61] Community policing had moderate evidence, based on a systematic review of 25 studies, including only one randomized controlled trial, that this approach had no discernible impact on crime and/or violence, although it did positively influence citizen satisfaction, perceptions of disorder and police legitimacy.[61, 100, 101] Problem-oriented policing had moderate evidence, based on a review of evaluations, including no randomized controlled trials, of a modest impact on the suppression of crime and violence.[61, 102] Problem-oriented policing strategies appeared to improve the performance of other policing strategies.[61]

Lastly, targeted enforcement had moderate evidence of a modest or even harmful effect on crime and violence, depending on the focus of the strategy. For example, gun enforcement strategies had moderate evidence of a modest impact on crime and violence, while drug enforcement had moderate evidence of a negative effect on violence.[61, 98, 99] Abt and Winship (2016)[61] conclude that targeted drug enforcement appears to have a limited impact on crime and violence and may actually increase violence by destabilizing the drug markets and increasing violence among drug sellers.

### Summary of gang activity suppression interventions

'Pulling levers' focused deterrence strategies are the most promising approach within the gang activity suppression category. They had the largest direct impact on crime and violence of all suppression strategies reviewed. There is moderate evidence that these strategies are associated with an overall statistically significant medium-sized crime reduction effect. The evidence for policing strategies was mixed, with hot spots, disorder and problem-oriented policing the most promising approaches for achieving reductions in crime and violence. Lastly, while targeted gun law enforcement shows some positive effects on crime and violence, targeted drug law enforcement may contribute to increases in these outcomes.

## 3.5 Corrections-based gang interventions

Corrections-based strategies can be classified as prison based or probation based.[83] As described previously, prison-based interventions were considered outside the remit of this review given that its intended audience is Drugs and Alcohol Task Forces, which operate in a community setting. Probation-based gang interventions may include specialized caseloads, specific re-entry programmes, and other intervention responses that focus on the specific challenges of gang offenders as they transition from a correctional facility back into the community; they may also focus on the gang context that contributed to their incarceration.

### Corrections-based gang interventions in review

Five intervention types were identified by the review team; these were categorized as corrections-based interventions that could be delivered in a community setting, or when the individual is transitioning back into a community setting.

The main intervention types are:

- Drug courts and treatment, which gives people with a drug dependency problem who are convicted of drug-related non-violent crimes the opportunity to participate in a programme of drug treatment. The court can decide to put the charge on hold or impose a reduced sanction if the programme of treatment is successfully completed. The environment is designed to be non-adversarial and judges offer encouragement and rewards based on the progress of the offender in completing the court's orders, which normally takes at least a year.
  - Examples include the Glasgow and Fife drug courts, the first pilot drug courts in the UK to follow a model established in the US, and subsequently implemented in several countries

- Aftercare programmes, which are designed to direct and support young offenders during their transition from a correctional facility to the community. The aim of these programmes is to ensure that young offenders on release from an institutional setting have supports available to enable them to lead a prosocial life and prevent relapse to gang involvement and offending. These programmes typically include pre-release training, mentoring, intensive supervision, family counselling, service coordination, and drug testing. They also incorporate therapeutic programme approaches, such as skill training, counselling, and cognitive behavioural therapy, directed at learning prosocial behaviours and attitudes.
  - Some examples of these include: Family Integrated Transitions programme (FIT), the Boys & Girls Clubs of America Targeted Re-entry Initiative, the Boston Re-entry Initiative, and functional family parole.

- Surveillance interventions, which aim to prevent juvenile reoffending through close monitoring during intensive probation or increasing the level of parole contact and supervision. The intervention is designed to prevent relapse as the offender goes through the transition to conventional behaviour.
  - Examples include: Intensive Supervision and Surveillance Programme (ISSP) in the UK, which combines supervision with surveillance in an attempt to create structure in youths' lives, in order to manage risk and reduce reoffending; HotSpot Community Initiative, Maryland, US, which uses teams

composed of parole and probation officers, youth counsellors and community policing officers who supervise probationers in their communities and perform activities such as curfew checks and home visits.

» Risk/needs/responsivity interventions (RNR), which aim to base treatment decisions on a comprehensive analysis of the offender's behaviour. Three principles are employed in analysis and decision-making in this range of interventions: Risk – the risk of recidivism is based on actuarial risk assessments; Needs – based on criminogenic needs such as family problems, educational difficulties or substance use; and Responsivity – the offender's capacity to benefit from cognitive behavioural therapy is increased by matching the rehabilitative intervention to both the offender's criminogenic needs and attributes such as learning style, motivation, capacities and personal strengths.
  - Examples of RNR interventions include intensive rehabilitative supervision (IRS) in Canada, which has used the intensive monitoring of offenders in supervision programmes to provide treatment services to offenders in a community setting.

» Restorative justice programmes, which aim to provide an opportunity for the offender to make amends for what they have done and seek the victim's forgiveness. Restorative justice conferencing involves a meeting between the offender, the victim(s), supporters of both sides, and a coordinator. Within the conference, both the victims and the offenders are invited to share their experience of the offence and to decide how best to repair the harm caused. Reparations may be made in the form of financial compensation or community service.
  - Examples include: Bethlehem Police Family Group Conferencing Project, the Indianapolis Juvenile Restorative Justice Experiment, Reintegrative Shaming Experiment (RISE) Juvenile Property Victims (JPP) Experiment, and RISE Juvenile Property Shoplifting (JPS) Experiment.

## Effectiveness of corrections-based gang interventions

Within the category of corrections-based gang interventions, the two most promising approaches are drug courts and treatment and interventions employing the RNR framework. It is well established that drug treatment and drug courts can significantly reduce recidivism. Abt and Winship (2016)[61] identified four reviews which confirmed this well-established finding, concluding that there is strong evidence, based on four reviews, that drug courts and treatment have a strong effect on reducing recidivism.

Similarly, there is strong evidence, based on five reviews, that interventions adopting the RNR framework have a strong impact on reducing recidivism among violent or non-violent juvenile or adult offenders. Moreover, this approach works in both community and institutional settings and is particularly effective when it incorporates cognitive behavioural therapy.[61]

The remaining interventions in this category had more limited evidence to suggest a small to insignificant effect. Specifically, there was moderate evidence, based on a review of 22 randomized controlled trials or quasi-experimental studies, that aftercare programmes designed to direct and support young offenders during their transition back into the community had a small statistically significant impact on reducing recidivism compared to usual or no treatment among young offenders. James *et al.* (2011)[81] suggest that the effects are short term, highly dependent on the quality of the intervention's implementation, and greater when care is individualized and targeted towards high-risk, gang-involved youth. Intensive surveillance through parole or probation and restorative justice programmes both had very limited evidence of a small or indiscernible effect.[73, 76]

## Summary of corrections-based gang interventions

Within the category of corrections-based gang interventions, the two most promising approaches are drug courts and treatment and interventions employing the RNR framework, both of which have strong evidence of a strong impact on reducing recidivism. The remaining interventions in this category, including aftercare programmes, intensive surveillance, or restorative justice, had more limited evidence to suggest a small to insignificant effect.

## 3.6 Comprehensive gang control programmes

Comprehensive gang control programmes aim to combine prevention, intervention and suppression activities to target all points along the gang involvement continuum. Gravel *et al*. (2013)[83] further specify comprehensive approaches as those which have at least one strategy from the prevention category (universal, selected or indicated) and at least two strategies from the gang activity regulation category (gang alternatives, gang activity prevention and gang activity suppression).

### Comprehensive gang control programmes in review

The main comprehensive programme models are:

» The *Comprehensive Community-wide Approach to Gang Prevention, Intervention and Suppression*, which has come to be known as the Spergel Model after its developer Irving Spergel. This model incorporates five strategies: 1) Community mobilization, which involves developing and maintaining partnership between public and private agencies, groups and residents to organize a programme responsive to the local gang problem; 2) Social intervention, which involves street workers developing outreach contacts with gang members and those at higher risk of gang membership to counsel targeted youth and provide liaison with schools, social services and criminal justice agencies; 3) Opportunities provision, which involves facilitating access for gang members to employment, job training, educational and cultural opportunities as alternatives to gang activity; 4) Organizational change and development, which involves reforming the policies and practices of public and private agencies to enable them to effectively respond to the needs of gang youth; and 5) Suppression, which involves the use of police, probation, parole and the courts to hold youth accountable for their criminal activities, including special anti-gang practices, police gang units, civil gang injunctions, and specialized gang intelligence. The Spergel Model differs from other models in that it describes the theoretical approach to gang control, specifies programme components, and also specifies guidelines for implementing the approach. Specifically, the developers suggest that implementation of this model requires, at a minimum, the following steps: 1) direct, continuing involvement of community leaders; 2) pre-project assessment of the seriousness of the street gang problem; 3) establishing precise project goals; 4) setting up the steering committee, lead agency and street worker teams; 5) careful selection and targeting of gang and high-risk youth; 6) implementing the comprehensive package of prevention, intervention, and suppression packages; 7) developing adequate gang data and case management systems useable across agencies; and 8) ongoing evaluation, monitoring and implementation of project change procedures over time.[82]
  - Examples of programme implementation include: Little Village Project (Chicago) (prototype), Spergel Model (Mesa, Riverside, Bloomington Normal, San Antonio, Tucson).

» *Project Safe Neighbourhoods* was categorized as a comprehensive intervention by Wong *et al*. (2012)[79] according to the Gravel *et al*. (2013),[83] definition. This programme involved community outreach, media campaigns, and school-based programmes to prevent delinquency. The main programme component is similar to a 'pulling levers' focused deterrence strategy as offender notification forums warn offenders that police are targeting violent crimes, and policing efforts are designed to target violent offenders and firearm-related crimes.[103]

» *Operation Ceasefire Chicago* was also categorized as a comprehensive intervention approach by Wong *et al.* (2012).[79] This approach is a 'pulling levers' focused deterrence strategy (as described in Chapter 3 Section 3.4 on suppression); however, it also included a public education campaign and outreach workers to prevent gang-related violent crimes, and violence interrupters on the street at night, stopping conflicts as they arise.[79, 104]

### Effectiveness of comprehensive gang control programmes

There is moderate evidence to suggest that comprehensive programmes have mixed effects on antisocial behaviour, gang involvement, and gang-related crime and violence. Wong *et al*. (2012)[79] considered five evaluations of comprehensive approaches, including: Project Safe Neighbourhoods, Operation Ceasefire Chicago, and three implementation sites of the Spergel Model (Bloomington Normal, Mesa and San Antonio) and

concluded that there were mixed effects. Huey *et al*. (2016)[35] considered evaluations of the Little Village Project in Chicago and the Spergel Model in its five implementation sites and found mixed effects on antisocial behaviour, gang involvement and gang-related crime. Klein and Maxson (2006)[82] contend that the mixed effects of the Spergel Model and others like it are, at least in part, attributable to its complexity.

Process evaluation data from the five implementation sites shed some light on why this promising intervention may not have realized its full potential.[35, 82] First, mixed findings may be due in part to poor implementation fidelity. Howell (2015)[105] argues that 'when implemented with high fidelity in Chicago, Illinois, Riverside, California, and Mesa, Arizona, there were statistically significant reductions in gang violence in all three sites, and in two of these sites there were statistically significant reductions in drug-related offences when compared with the control groups of youth and neighbourhoods. In addition, departure from gangs was hastened, and the reduction in the level of youth gang affiliation was significantly associated with lower violence and drug arrest' (p. 432). Moreover, establishing interagency partnership proved challenging. For example, in the five implementation sites, programme leaders had difficulty in gaining the cooperation and partnership of the various agencies required for community mobilization and interagency partnership working, due partly to divergent political and organizational interests. In these sites, the data systems were found to be insufficient to facilitate ongoing monitoring and sharing of information across agencies. Lastly, there were challenges in the effective delivery of outreach, as the outreach workers were not accepted by the community and the night time and weekend hours required for effective engagement of targeted youth were not accepted by the outreach workers. Beyond the implementation of the programme, there were mixed performances by those who were charged with its evaluation.

Between the five sites, there were considerable differences in implementation. In two cases, the differences were so substantial that some review authors no longer considered them 'comprehensive' programmes. For example, the Bloomington Normal programme '...emphasized a suppression approach. It did not include grassroots groups, and did not develop an adequate outreach youth worker approach. Little attention was paid to an appropriate mix of strategies for different youth, to the modification of the roles of the different types of workers, and to how different agency workers were to function together to create an improved, inter-organizational, street-level worker structure and process to meet the interests and needs of gang youth, and the needs of the community, within the framework of the model' (p. 14-15).[106]

Likewise, the Riverside programme implementation was limited to juveniles on probation for an offence related to gang violence. This programme adopted a case management approach, providing access to youth employment services, counselling and educational services. As such, the prevention element was excluded. Mixed success in implementing this comprehensive gang control strategy and mixed success in evaluating its effect may have contributed to its mixed findings.

### Summary of comprehensive gang control programmes

Comprehensive gang control programmes are promising, but thus far have failed to reach their potential, producing mixed effects. Comprehensive programmes, while intuitively appealing, require the building of strong interagency partnerships with effective communication and data-sharing strategies to ensure good implementation fidelity. Their complexity, with multiple programme components and stakeholders with differing priorities, requires a strong lead agency that is able to coordinate activities across partnering organizations and effectively mobilize community representatives. The inclusion of a process evaluation has enabled lessons to be learned from the failed implementation of this model, which can be incorporated into future iterations of this approach.

## 3.7 Holistic gang control programmes

Holistic gang control programmes span the entire gang continuum from preventing gang membership in the first instance through to rehabilitating those who are convicted of gang-related offences. Holistic approaches were defined by Gravel *et al.* (2013)[83] as programmes incorporating at least four strategies from the overall typology, including one from each of the prevention (universal, selected, indicated), gang activity regulation (gang alternatives, gang activity prevention, gang activity suppression) and corrections-based (probation-based or prison-based) categories. In order to ensure programme continuity, strategies must also be overseen by the same organization or must involve close contact and regular communication between the different organizations responsible for each strategy. Holistic approaches are based on the rationale that if a strategy includes gang activity suppression, then it should also consider how the gang problem can be addressed when gang members are incarcerated, and on their return to the community.[83]

### Holistic gang control programmes in review

The Gang Reduction Project, which was implemented in four cities, including Los Angeles, Milwaukee, North Miami Beach and Richmond, was the only holistic programme identified. With variation across sites, it included prevention activities, such as after-school programmes, truancy intervention, mentoring, public awareness programmes, recreational activities, and gang awareness training. It included intervention activities such as case management with gang-involved youth and street outreach, substance abuse counselling, mentoring and sports activities. It included suppression activities such as targeted gang enforcement, police gang units and hot spots policing. Lastly, it included re-entry services such as case management, job training, tattoo removal, counselling and skills training.

### Effectiveness of holistic gang control programmes

Wong *et al.* (2012)[79] identified one report documenting quasi-experimental evaluations of this approach in four cities (Los Angeles, Milwaukee, North Miami Beach and Richmond),[107] which provided modest evidence of a mixed impact on reducing gang-related crime. There were no significant treatment effects found in two sites. In the third site, there was a significant decrease in the target area for shots fired and gang-related crime alongside no concurrent significant decrease in the comparison area. In the last site, there was no significant change in drug-related incidents, but a concurrent significant increase in the comparison area. The authors note considerable variation in implementation of the programme in the four sites, which may partly explain the mixed findings.

### Summary of comprehensive gang control programmes

The evidence regarding holistic gang control approaches is mixed and inconclusive. There is limited evidence from only one identified programme of this nature.

# 4 In-depth analysis of the gang desistance process

The literature identified in relation to desistance from gang activity was limited; it included evaluation of very few interventions targeting this specific outcome, and none of the interventions identified have shown any discernible effect. To address this gap in the available evidence, we refined our approach to addressing this question to consider primary studies offering either quantitative or qualitative data on the process of desistance from gang involvement or gang-related offending. The aim of this in-depth analysis of the gang desistance literature is to identify key principles of the desistance process using data on the lived experiences of former gang members to guide those working to promote gang desistance among active gang members. In this chapter we describe our approach, present a definition of gang desistance, describe the theoretical model that was selected as the best fit framework and discuss its further development through its application to the desistance literature identified for this review.

## 4.1 Search results

The search for literature on gang desistance, as detailed in Appendix 2, yielded 332 study records. After removing duplicates there were 244 studies for screening by title and abstract. Based on broad inclusion criteria (primary studies, quantitative or qualitative, examining desistance from gang involvement or gang-related offending), 81 of these studies were retained for screening by full text. After limiting the results to studies published in the peer-reviewed literature (excluding grey literature), there were 28 studies remaining. After full-text screening, nine qualitative studies (plus two additional studies identified through reference chasing), eight quantitative studies, and two mixed methods studies were retained for quality appraisal, data extraction and analysis (n=21) as listed in Table 5 below. The characteristics of included studies are described in Appendix 5.

### Table 5: Included studies by study type

| | Qualitative studies | Quantitative studies | Mixed methods studies |
|---|---|---|---|
| 1 | Berger *et al*. (2016)[37] | Carson *et al*. (2013)[46] | Decker, Pyrooz and Moule (2014)[48] |
| 2 | Bolden (2013)[41] | Melde, Diem and Drake (2012)[54] | O'Neal *et al.* (2016)[57] |
| 3 | Campbell and Hansen (2012)[44] | Melde and Esbensen (2014)[55] | |
| 4 | Deuchar *et al.* (2016)[63] | Pyrooz and Decker (2011)[75] | |
| 5 | Flores (2009)[50] | Pyrooz, Sweeten and Piquero (2013)[58] | |
| 6 | Goodwill and Ishiyama (2016)[52] | Pyrooz, Decker and Webb (2014)[72] | |
| 7 | Gormally (2015)[66] | Sweeten, Pyrooz and Piquero (2013)[78] | |
| 8 | Halsey *et al.* (2016)[53] | Weerman *et al.* (2015)[80] | |
| 9 | Moloney *et al*. (2009)[56] | | |
| 10 | Sogaard (2015)[59] | | |
| 11 | Nugent and Schinkel (2016)[69] | | |

## 4.2 Data extraction and analysis

### 4.2.1 Approach

The 'Best Fit Framework Synthesis' approach was chosen to guide the extraction, analysis and synthesis of data.[108] This approach provides 'a means to test, reinforce or build on an existing theoretical model, which was conceived for a different, but potentially relevant population' (p. 1).[108] The best fit framework approach begins by selecting an existing framework where one exists, or creating a framework of *a priori* themes and coding data from included studies against that thematic or conceptual framework.[108] Carroll and colleagues (2013)[108] contend that 'this approach produces a relatively rapid, transparent and pragmatic process when compared to more exclusively interpretive forms of synthesis because a substantial amount of the data to be included in the review is often coded against the *a priori* framework' (p. 1). Any data that do not relate to aspects of the framework can be incorporated using complementary inductive thematic analysis techniques, assuming it is relevant to answering the question under consideration.[109]

### 4.2.2 Framework selection

For pragmatic reasons, we adopted an approach advocated by Carroll and colleagues, who were '... the first to explore the strengths and limitations of a pragmatic "best fit" approach using an existing conceptual model as a starting point to identify *a priori* themes...' (p. 2).[109] We screened a large number of studies from the gang-related desistance literature to identify an existing theoretical or conceptual framework which would provide a 'best fit' for our work. The theoretical framework – Ebaugh's (1988)[110] role exit theory – applied by Decker, Pyrooz and Moule (2014)[48] in their study of disengagement from gangs was chosen as the conceptual framework to guide data extraction, analysis and synthesis of data. The study by Decker, Pyrooz and Moule (2014)[48] was used as an index paper to develop each of the concepts within role exit theory and expand the initial framework. The framework included four main categories from which to code data: first doubts, seeking alternatives, turning points and post-exit validation.

### 4.2.3 Data analysis

The 'best fit framework' was then used to code and extract data from each included quantitative and/or qualitative study to identify key constructs of importance to the desistance process. We used thematic synthesis to code, analyse and synthesize the qualitative data; we used narrative synthesis to code, analyse and synthesize the quantitative data. The thematic synthesis approach involves three main stages: 1) line-by-line coding; 2) developing descriptive themes; and 3) generating analytical themes. Line-by-line coding proceeded through two rounds: the first round coded study data (defined as information presented in 'Chapter 3: Results') that spoke to overarching concepts within the framework, whereas the second round further characterized the constructs falling within each first round concept. As described by Carroll *et al*. (2011),[109] '...relationships between the themes of the framework are then either recreated or generated based on the evidence from the primary research studies included in the review. A new model or theory of the particular health behaviour of interest in the population or setting of interest is thus created...' (p. 2). The aim of this in-depth analysis is to identify a middle-range theory of gang desistance, which may provide principles to incorporate into an intervention in this space based on the lived experiences of gang members who have successfully desisted from gang involvement.

## 4.3 Quality assessment

The quality of included studies was appraised using the McGill Mixed Methods Appraisal Tool – Version 2011, developed by Pluye *et al.* (2011).[111] This tool was designed for the appraisal stage of literature reviews that include qualitative, quantitative, and mixed methods studies. Overall, the studies providing evidence for this synthesis were conducted and/or reported with moderate to high methodological quality.

### Table 6: Quality appraisal of primary studies in desistance analysis

| MMAT Score | MMAT Appraisal | Qualitative | Quantitative | Mixed methods |
|---|---|---|---|---|
| 25% | Low | | | |
| 50% | Moderate | | | O'Neal *et al*. (2014)[57]<br>Decker, Pyrooz and Moule (2014)[48] |
| 75% | | Berger *et al*. (2016)[37]<br>Bolden (2013)[41]<br>Campbell and Hansen (2012)[44]<br>Flores (2009)[50]<br>Goodwill and Ishiyama (2016)[52]<br>Halsey *et al.* (2016)[53]<br>Moloney *et al.* (2009)[56]<br>Sogaard *et al.* (2015)[59] | Carson *et al*. (2013)[46]<br>Melde *et al*. (2012)[54]<br>Melde and Esbensen (2014)[55]<br>Pyrooz, Sweeten and Piquero (2013)[58] | |
| 100% | High | Deuchar *et al*. (2016)[63]<br>Gormally (2015)[66]<br>Nugent and Schinkel (2016)[69] | Pyrooz, Decker and Webb (2014)[72]<br>Pyrooz and Decker (2011)[75]<br>Sweeten *et al.* (2013)[78]<br>Weerman *et al.* (2015)[80] | |

## 4.4 Findings

### 4.4.1 Definition of desistance

Desistance is defined as the cessation or stopping of some action or proceeding. The broader literature on desistance from crime focuses on the cessation of behaviour, whereas gang desistance attempts to understand and explain the process of de-identifying as a gang member. According to Maruna (2015),[112] '...desistance research... focuses on individual lives or journeys over time. Particularly prominent among this work is (mostly) qualitative research that focuses on the self-narratives of individuals who have moved away from crime...' (p. 313).

### 4.4.2 Qualitative study findings and analysis: the descriptive themes

#### First doubts

According to Ebaugh (1988),[110] the first stage of the role exit process involves a questioning of one's commitment to their current role and a reinterpretation of this role, often triggered by stresses or changes, burnout, role disappointments, or a specific event. Ebaugh (1988)[110] suggests that 'once individuals begin to question their role commitment and consciously admit doubts...they frequently emit cues that indicate, both to themselves and to others, their discontent with their current social role' (p. 84). Five qualitative studies provided data that speak to the construct of first doubts.[37, 44, 48, 52, 66]

#### *First doubts and concerns about gang-related violence*

A number of authors reported that participants expressed doubts about their ongoing commitment to gang life.[37, 44, 48, 52, 66] The main area of concern was gang violence, which may be construed as a 'push factor'. Push factors are forces within gang

life that push gang members to reconsider their commitment and loyalty to the gang. Push factors can prompt cognitive shifts and re-evaluation of the costs and benefits of gang involvement; these experiences can undermine the appeal of the gang and push gang members to seek out alternative opportunities. For example, participants in the study by Decker *et al*. (2014)[48] began to doubt '... the moral legitimacy of the gang... [And expressed] concerns about violence to themselves and others. At this stage, there [was] no commitment to leave the gang, just an exploration and consideration of options...' (p. 273). Berger *et al.* (2016)[37] state that '...participants reported that they engaged in questioning the gains and costs of being a gang member and their loyalty and commitment to peers, the nature of the relationship with their family of origin, and the spiritual and cultural connection with their religious and ethnic roots ...' (p. 8). In this study by Berger and colleagues, the loss of close associates as a result of gang violence and witnessing friends go to prison for a long time were cited as factors underpinning their doubts regarding their continued membership of the gang. Berger *et al.* highlight the strength of the concern expressed by participants about gang violence '...gang-related violence is more predominant in changing the affiliation of core gang members than the desire to re-enter a normative life course ...' (p. 11). In the study by Goodwill and Ishiyami (2015),[52] participants were invited to respond to the question 'think back to the time when you began your journey out of gang life. What happened that decreased your level of personal investment in gang life? What facilitated your path out?' For participants in this study, the drawbacks of gang violence were a key concern.

### *First doubts and disillusionment*

Closely related to concerns about gang violence reported in the reviewed studies was the notion of disillusionment and how becoming disillusioned contributed to doubts about gang membership. For example, a number of studies captured participants' disillusionment, which centred on gang life and the associated activities of the gang. This extract from the study by Campbell and Hansen (2012)[44] neatly illustrates the activities underpinning this disillusionment: '...the allure of wealth accumulation, and the respect it engenders, is the primary factor for many who weigh decisions of entry into or exit from illicit drug trafficking...the ongoing appeal of status and power are major obstacles to desistance...yet in describing how they left the game many of our interviewees discussed how easy drug money and conflicts over its distribution corrupted human relationships leading to schisms with business partners, including relatives, and eventually disillusionment with trafficking...' (p. 483-484). O'Neal *et al.* (2014)[57] also reported that among their participants '...for both females and males, tiring of gang life... [was among] the main sources that influenced their exit from gangs...' (p. 9).

### *The family as a site of first doubts*

A number of authors reported that participants raised the issue of their family relationships as forming part of their doubts about continued commitment to the gang.[37, 48, 52, 57, 66] However, none of these studies developed this point very satisfactorily, so we highlight its reporting. For example, Decker *et al*. (2014)[48] reported that participants expressed 'doubts about the gang lifestyle [and] their future with their family...' (p. 273). Berger and colleagues reported that '... the nature of the relationship with their family of origin...' (p. 8) formed part of their doubts about commitment to the gang.[37] Goodwill and Ishiyami (2015)[52] reported that their participants drew attention to the potential of gang violence damaging family life. While O'Neal *et al.* (2014)[57] reported that '...starting a family was [among] the main sources that influenced their exit from gangs...' (p. 9).

Gormally (2015)[66] discussed the investment that young people put into the gang to get something back, how gang membership can be a fluid situation, and how doubts about membership often arise. According to Gormally (2015),[66] '... many of the young people concerned were in the process of balancing up their options and evaluating the pros and cons of still being involved in certain behaviours, or being aligned with the youth gang...' (p. 159). In many cases, they focused on potential personal consequences, such as going back to prison, and worried about the impact of gang behaviour on their families or damage to their personal reputation. However, as Gormally (2015)[66] points out '...This did not mean that their identification was conclusive; rather, they all dipped in and out of the behaviour based on circumstances, often which were unpredictable. It was a process of engagement and desistance...' (p. 159).

## Anticipatory socialization or seeking alternatives

According to Ebaugh (1988),[110] '...Alternative seeking behaviour is essentially a comparative process in which alternative roles are evaluated in comparison with the costs and rewards of one's current role...' (p. 87). Eleven qualitative studies provided data that speaks to anticipatory socialization.[37, 48 41, 44, 50, 52, 53, 56, 63 59, 69]

### *Role experimentation*

We identified six studies that speak to role experimentation as part of the process of seeking alternatives to gang membership; these studies clearly outline instances where participants report seeking alternative roles outside of the gang.[37, 41, 48, 50, 56, 63]

Experimenting with alternative roles is a difficult process and can take place while gang members remain involved to some extent with gang life. For example, Decker *et al.* (2014)[48] reported that '...subjects described this as a time [role experimentation] when they took two steps forward and one step backward. For many, simply participating in the gang outreach programme... was an example of such role experimentation...' (p. 274).

'Maturing out' of gang life is often associated with seeking alternative roles. According to Decker *et al*. (2014),[48] '...For many subjects, maturational reform was a key element in the anticipatory socialization process toward a new role...in some instances, anticipatory socialization not only involved looking forward to new roles, it involved severing ties to old roles...' (p. 274). Bolden (2013)[41] also refers to the role experimentation expressed by gang members as they 'matured out' of the gang: '...In the case of maturing out, members wanted to move on with their lives by getting a legitimate job or getting married...' (p. 486).

In some studies, the authors report that role experimentation can be both facilitated and frustrated by the reaction of other gang members. For example, in the following extract from Decker *et al.* (2014),[48] there is little apparent opposition to the gang member who is preparing to exit: '...in some cases, anticipatory socialization was originated by the individual, but occasionally the gang distanced itself from the individuals who began to move towards roles outside the gang...' (p. 274). In the study by Berger *et al.* (2016),[37] the support of other gang members was sought by the exiting members: '...the majority of participants made an attempt to explain and justify their decision to leave, seeking to gain their peers' understanding and approval. They gradually reduced their gang's antisocial involvement and their frequency of their social engagement with gang members while simultaneously making the first steps in pursuing more normative activities and new social contacts...' (p. 9). While these two studies show little evidence of peer pressure from gang members to remain, in the study by Deuchar *et al*. (2016)[63] there was a conflict between seeking new alternatives and pressure from other gang members to remain. Citing the experience of their interviewees, Deuchar and colleagues (2016)[63] report that '...they [exiters] wanted to stop smoking cannabis and to leave the gang life behind, but they felt a pressure exerted upon them by their former peer group when they returned to their community in the evening and how this threatened to pull them back into offending lifestyles...' (p. 732).

### *Role experimentation and masculinity*

Deuchar and colleagues (2016)[63] undertook an ethnographic study with young gang members in a boxing club and found that the reconstruction of masculinity was an important feature of role experimentation. Citing the experience of one individual, Deuchar *et al.* (2016)[63] reported that '...for many years, Haadi had constructed his masculine identity through crime. During our interview he indicated that he was beginning to build new and alternative masculine identity centred on the demonstration of his ability and will to desist from crime and problematic drug consumption...' (p. 734). In tandem with reconstructing their masculinity, participants also used the male culture of the boxing club to explore and construct alternative male relationships, often with other former gang members. According to Deuchar and colleagues (2016),[63] '...the gym served as masculine space where men, eager to change their lives and leave local street gangs, could engage in male bonding and try to build new and more prosocial forms of male relationships... the young men explained how they enjoyed the camaraderie gained from hanging around in a safe space with groups of guys who they had grown up with and trusted...Our own [Deuchar *et al*. 2016] observations reinforced the importance of the overtly masculine camaraderie and sense of 'brotherhood' that prevailed...' (p. 734).

The theme of pursuing alternative roles through a reconstruction of masculinity was also picked up in the study by Sogaard *et al.* (2015).[59] Participants in this study spoke to the value of securing legitimate employment, an endeavour they associated strongly with the 'working masculine male' role. According to Sogaard and colleagues (2015),[59] '...For the young men we encountered getting a job and a steady income was assumed to be crucial to their reformatory process...many of the young men had started to re-orient their identity formation towards work even without having obtained any...from the perspective of our informants, employment seemed to offer both economic as well as symbolic benefits such as opportunities to achieve status and display to others that they were making positive changes in their lives. Narratives about work-related experiences, however, hopes and dreams were also central to how the young men tried to construct reformed masculine identities...the associative parallels, between the work ethic needed in the boxing and in the legitimate labour market seemed to underpin the young men's construction of a reformed 'working man narrative' ... (p. 12-13).

Experimenting with new and reformed roles of masculinity and the working man, although prominent in some studies, were often frustrated by the lack of external changes to the way that gang members were viewed in society. This tension is neatly encapsulated by the work of Deuchar and colleagues (2016),[63] who cite the experience of one of their interviewees: '...increasing his motivation towards taking fledgling steps towards desistance... he was beginning to see a possible alternative to a criminal lifestyle. [He] had begun to aspire towards more conventional modes of masculinity and he was desperate to have a 'normal' life which he described with reference to the standard bearers of adult masculinity such as gaining employment, owning his own home and car... [however] due to stigmatization, the continuing experience of social exclusion and inability to achieve the trappings of perceived 'traditional' manhood presented continuing feelings of status frustration...' (p. 732).

The idea that status frustration leads to the failure to achieve normative goals is also highlighted in the study by Nugent and Schinkel (2016)[69] as a key contributing factor to frustrate masculinity reformation. In describing the experience of some of their participants, Nugent and Schinkel (2016)[69] point out that '...most wanted to achieve other goals, usually employment, which would allow them to be the men they wanted to become. Here, their wish to achieve identity desistance conflicted with their criminal record and their previous experiences of deprivation (which had left most with no qualifications or work experience) to produce the pain of goal failure: since leaving prison (which for many was years in the past) most had not been able to take any meaningful steps towards their desired identity...' (p. 573).

### *Role experimentation and prosocial groups*

In the study by Flores (2009),[50] participants sought out and experimented with alternative roles through religion and a reconstruction of their masculinity. Flores (2009)[50] develops the constructs of 'deviant barrio masculinity' to capture the deviant expressions of masculinity through crime and gang life, and 'reformed barrio masculinity' as capturing the contemplation and pursuit of mainstream values such as having a stable job, getting married and having children. According to Flores (2009),[50] '...the continuity between deviant barrio masculinity and reformed barrio masculinity provides a bridge for youth who have acculturated into gangs, but now seek to achieve the American dream: to maintain a stable job, get married and have kids. This goal implicitly requires avoiding confrontation with the legal system...' (p. 1005).

Flores (2009)[50] draws on the experience of one interviewee to illustrate the nature of this continuity from deviant to reformed barrio masculinity. This interviewee was seeking alternatives to gang life when he had an unexpected encounter with other former gang members. According to Flores, the interviewee, a second-generation Mexican-American, recall[ed] '...the first time he tried to look for changes in his life, away from the gangs. [He] saw gang members on a flyer advertising a Victory Outreach performance and attended without knowing it was a spiritual event ...' (p. 1005). It turned out that these former gang members were from his community, they dressed like him, spoke like him, wore tattoos, had lots of girlfriends and he aspired to be like them. However, they didn't use drugs and didn't go to prison anymore and he wanted the same.

Flores (2009)[50] suggests that although the former gang members exhibited the cultural style of the Chicano identity via their fashion and language, characteristics often linked with an oppositional identity, their behaviour and their values were mainstream, and this apparent tension was played

out and accommodated through their participation in the Victory Outreach church. Flores (2009)[50] claims that the attitudes of '...victory outreach members suggests that reformed barrio masculinity challenges segmented assimilation's conflation of oppositional style and values; an oppositional style is not necessarily synonymous with anti-mainstream values...' (p. 1005). Seeking alternative lifestyles through religion and a reconstruction of masculinity were predominant features of this study and Flores (2009)[50] attributes the change in values to religion: '...the values of Pentecostal evangelicalism redirected masculine behaviour towards household needs, and induced upward mobility for members and their families...' (p. 1009).

### *Role experimentation and fatherhood*

Re-evaluating one's role in the gang and contemplating alternatives were also triggered by fatherhood. For example, according to Moloney *et al*. (2009),[56] '...becoming a father led many to re-evaluate their past activities and their priorities... some fathers reported that this was the first time in their life that they felt any sense of priorities... fatherhood facilitates a reorientation to a life with a future and new possibilities...a fundamental shift in outlook from a present-orientated life in which they never looked beyond today to one that includes a future orientation...' (p. 314). In some cases, prioritizing family obligations was influenced by the new demands on the fathers; different from the demands made by their gang members. For example, according to Moloney and colleagues (2009),[56] '...some men explained that the responsibilities of fatherhood (and in some cases the demands of the baby's mother) necessitated a reorganization of their time that led to fewer opportunities to participate in criminal activities; they were simply too busy to get into trouble...' (p. 313). However, Moloney *et al*. (2009)[56] acknowledge that these changes may also be due to these young men maturing, but also see this maturation as related to their fatherhood; they now have more to lose, so they consider the risks of imprisonment or death if they stay gang involved. However, while experimenting with the role of fatherhood, most of these men expressed the view that they needed to secure long-term employment to fulfil the role of 'breadwinner', which they viewed as central to being male; for some of the men this was not a viable pursuit. Some young men in the study reduced their illegal activity via selling hash instead of crack cocaine, while others desisted completely and navigated the legitimate economy; both types of pursuit were to provide money for their family. The barriers of frustration encountered by the young men seeking a legitimate route are well illustrated in this passage from Moloney and colleagues (2009):[56] '...when the men applied for jobs they were confronted with...being forced to disclose their records, which meant that they were unsuccessful in reaching their goals of gainful employment, because society at large saw them as (potential) offenders rather than desisters, and rejected them as such...' (p. 574).

### *Role ambiguity*

The process of seeking alternative roles from gang life for participants in these studies was often compounded by their ambiguity about this process and how best to undertake role comparisons. Role ambiguity arises when people are unclear or uncertain about their expectations within a certain role. An example of role ambiguity is well illustrated in this extract from Decker *et al*. (2014),[48] who point out that '...[exiters] looked forward to many of the trappings of a new role, but felt enmeshed in the goings on of the old role...' (p. 274). Decker and colleagues (2014)[48] cite the experience of one interviewee who told them that '...leaving the gang was similar to being in recovery from addiction...' (p. 274). In this example, the gang member talked about not having fully transitioned into being out of the gang. Berger *et al.* (2016)[37] also picked up on this 'dual membership', which seems compounded by the continuing social exclusion and labelling that is being experienced: '...several gang members reported a more intermittent exit and were "teeter tottering" between attempting to build a new life and associating with their former gang members. These individuals were those that could not find gainful employment and those still harassed by the police...' (p. 9). The sense that one's identity remains caught up with the gang and that loyalty to gang members remains an important value for some of the men in these studies comes through strongly in the study by Sogaard and colleagues (2015),[59] it is this loyalty to their former gang associates that seems to cause ambivalence. According to Sogaard *et al*. (2015)[59] '...While accounts of dramatic turning points...and past/present (masculine) selves figured centrally in the young men's desistance narratives, so did ambivalence and doubt. As an example of this, some of the young men's narratives indicated that they were caught between their desire to act as reforming and responsible men (implying both a concrete and associative distancing from

criminal activities and past selves) on the one hand, while on the other hand, they also felt a strong commitment to perform as loyal friends and "brothers", who were willing to "back up" close friends or family members physically if these were in serious trouble…' (p. 11).

It would appear from the studies examined that role ambiguity arises when individuals who are between gang and non-gang life contemplate alternative roles while being reminded of the obligations of their role to the gang. It would also appear that ambiguity arises when gang members pursue alternative roles, but are frustrated in doing so, on the grounds that society is not ready to acknowledge their new roles. This experience often leaves gang members seeking to exit gang life in a quandary, a state of affairs neatly encapsulated by the following observation by Campbell and Hansen (2012),[44] who state that '…Forced by circumstances or pulled by opportunities to desist, traffickers still feel pride in their "accomplishments". Yet they also lament their inability to cast off a social identity—whether adopted by them, attached to them by a criminal record or fixed onto them by peers, kin, and social circle—that limits future educational and employment opportunities. Now they can barely afford to take a girlfriend to a movie or a restaurant. Their name in the paper or on television is a social black mark. A federal drug conviction cripples their job prospects. Even without a conviction, white-collar professional environments are alien and disorienting…' (p. 486).

## Turning points

According to Ebaugh (1988),[110] '…a turning point is an event that mobilises and focuses awareness that old lines of action are complete, have failed, have been disrupted, or are no longer personally satisfying and provides individuals with the opportunity to do something different with their lives. Old obligations and lines of action are diminished or seen as undesirable and new involvements are seen as possible…' (p. 123). Three qualitative studies speak to the concept of turning points.[37, 48, 56]

### *Recognizing obligations to family*

Recognizing obligations to their family appears to be a key turning point in some studies. For example, Decker *et al*. (2014)[48] reported that: '… many subjects identified a specific time or event that they left their gang for, and in a majority of those instances, family was the key variable that was a hook for change. While maturation and exposure to violence-personally or violence-vicariously was important, they were secondary to family issues…in some cases the concern about family extended to children and particularly the birth of a child…another gang member said his mother's stress over his safety led him to leave the gang…the thought of an extended period of time in prison was also salient for disengagement…' (p. 275). This extract from the work of Decker and colleagues (2014)[48] clearly illustrates that recognizing obligations to their family was of paramount importance for participants; however, it is unclear whether obligation to one's family triggered other concerns (fear of violence or imprisonment) or whether these other factors triggered the recognition of obligations to family. It is unclear what changed their family relationship to give it new meaning. There are a number of factors cited that appear closely related to the rebuilding of family relationships, but how these factors relate to the primacy of the family is not explored. For example, exposure to gang-related violence both personally and vicariously could have propelled participants to fear for their own safety and that of their family; such concerns may have caused participants to establish close bonds with family members, which may have improved relationships. Fear of going to prison for an extended period would mean separation from the family, and again, this fear may have brought gang members closer to family members indirectly. The birth of a child can also precipitate a change in orientation from the gang to the home, which would potentially improve relations with family.

The work by Berger *et al.* (2016)[37] is equally vague about explaining what reshaped the participants' sense of obligation to the family. Berger and colleagues present a number of important triggers for exiting the gang, including upholding family responsibilities; however, they collapse these factors into one statement and fail to develop an analysis of how these triggers may relate to the participants' willingness to recognize their obligations to the family. Berger *et al.* state that: '…among the triggers reported by our formers were traumatic events (e.g. losing a family member/close friend, experiencing life-threatening violence), personal crises (e.g. facing a long-term jail sentence, being separated from a loved one), a collective crisis (e.g. civil riots), and upholding family responsibilities (e.g. becoming a parent, being involved in intimate relationships or marriage).'

All of the triggers or turning points cited above appear closely related, but we know little about the nature of this relationship other than that obligations to the family appear to form a strong connecting thread. To explore this point further, we have paraphrased a number of interviewee accounts presented in the paper by Berger and colleagues (2016) to highlight the close relationship between family and the other factors cited. We do this on the grounds that it is the family that is one of the few constant entities in the lives of participants when they desist, and therefore it is important to know what drives these family obligations that are reported.

The death of a young brother by a rival gang and the emotional plea by the mother to walk away was enough to consider leaving the gang as cited by one gang member in this study. Another gang member charged with the murder of a rival gang member feared spending a long time in prison and this forced him to re-evaluate his links with the gang. Another gang member was shot by a rival gang and this made him re-evaluate his links with the gang. The Los Angeles riots made another member aware of the political and racial nature of the oppression in his community and that the gangs were killing their own people; he quit gangs and started working for the community. Another woman exited when she realized her children were starting to mimic the gang lifestyle. According to the authors, '...the disillusionment experienced from the gang's inability to fulfil their needs for safety, protection and emotional support propelled them to consider their involvement in the gang...' (p. 8).[37]

Threats to one's safety, security and emotional balance may well have precipitated a crisis of disillusionment with gang life; however, these threats are also played out in the context of renewed obligations to the family, as illustrated in our paraphrasing of the interviewee accounts: the death of a brother and the plea of a mother, the potential fear of separation from family by imprisonment, the experience of personal violence which would have affected the family, the realization of damaging community life and by inference family relationships, and the concern of portraying a negative role model to children. All of these experiences occurred in close proximity to the family and their impact may well have resulted in participants' recognition of their obligations to the family as being of primary importance.

### *Becoming a father*

The experience of becoming a father is closely related to the construct of recognizing family obligations as a turning point in the lives of participants. For example, Moloney *et al.* (2009)[56] state that: '...most participants faced futures of incarceration or possibly a violent death; fates met by many of their friends. Indeed, fatherhood was credited with not only changing their lives, but, literally, saving their lives...while a few claim that fatherhood didn't change their lives at all, the vast majority of young men recount fatherhood as a turning point...' (p. 312).

Moloney and colleagues (2009)[56] attribute fatherhood with primacy in saving the lives of participants from imprisonment and/or violence. However, the experience of fatherhood meant different things to different people in the study and it is not clear why some were motivated to leave the gang when becoming fathers, while others remained involved at least to some extent. Moloney and colleagues (2009)[56] point out that: '...if we look beyond their self-descriptions of transformation and place these narratives in the context of their ongoing experiences, even their own self-reports of continuing gang-related activity belie the notion of fatherhood as panacea. Though fatherhood acts as a potential turning point for the majority, not all are able to successfully navigate this new life course...' (p. 316).

In this respect Moloney and colleagues (2009)[56] appear to be drawing attention to 'fatherhood's potential as a turning point'; not as a panacea, which seems a more realistic analysis as these men are no different from non-gang members who also struggle with the demands of fatherhood and parenthood. Indeed, Moloney and colleagues (2009) highlight these struggles with parenthood that are similar to the experiences felt by most fathers. They point out that for some of these men, '...pride in and prioritization of their children does not mean that they always fulfilled their parental responsibilities or met the expectations of their children's mothers for financial, emotional or physical/childcare support...' (p. 313).

Moloney and colleagues (2009)[56] do provide a good analysis of the role that fatherhood can play in extending desistance, at least for some participants. For example, they interpret some accounts of fatherhood through the lens of social control theory by pointing out that the baby's mother imposes a curfew on the fathers and

demand that they are at home instead of out on the streets. These demands from the mother act as informal social control mechanisms and create distance between the gang and the father.

Moloney *et al.* (2009)[56] argue that the accounts provided by men in their study point to desistance as a process. They argue that: '...although these fathers' narratives of change are often dramatic, with descriptions of sudden changes in outlook, actual changes in behaviours were gradual, suggesting that desistance is best understood as a process – gradual and cumulative – rather than as an abrupt or discrete phenomenon...' (p. 315).[56]

In arguing that desistance is a process, Moloney *et al.* (2009)[56] point to the slow pace of behaviour change among many of the young men. Some changed immediately when learning of the pregnancy, others when the first child was born, others when the risk of losing custody of the child became real and others when other children were born and they had aged and matured themselves. They argue '...clearly fatherhood alone was not sufficient to change...' (p. 316).

Moloney *et al.* (2009)[56] caution against seeing fatherhood as an event that is like a single turning point. They argue that '...our analysis leads us to agree about the importance of agency and contingency in the desistance process. The agency and decisions of each man, and his subjective interpretations of fatherhood, are a crucial determinative factor in shaping the efficacy of this potential turning point...' (p. 316). What Moloney and colleagues (2009)[56] seem to be inferring is that the event of becoming a father may only become a turning point to new priorities and behaviours if the men are capable of acting on their agency and the conditions around them are supportive and receptive to change.

## Post-exit validation (creating the ex-role)

The final stage of the role exit process is post-exit validation or 'creating the ex-role', a stage that involves tension between one's past, present and future roles. Ebaugh (1988)[110] describes the 'challenge of incorporating a previous role identity into a current self-concept... [and the] struggles to become emotionally disentangled from the self-perceptions and normative expectations of a previous role, while at the same time people in society are expecting certain role behaviour based on a previous identity' (p. 149). Seven studies provided data which speak to the construct of post-exit validation.[37, 48, 50, 53, 56, 59, 63]

### *Identity and belonging in creating the ex-role and seeking post-exit validation*

According to Decker *et al.* (2014),[48] '...the validation of one's status as a former gang member comes from within, but also from external reference groups. These groups can include members of the former gang, rival gangs, family, or in some cases the police. Without this validation, those seeking to disengage may drift back to the gang...' (p. 276).

Prioritizing the obligation of fatherhood over gang membership, the removal of the threat of violence to self and family, being rebuffed by gang members after exiting and erasing phone and social media contact with gang members were cited by participants in the study by Decker and colleagues as signs of validation for their decision to leave the gang. Based on the data, the review team argues that citing the primacy of fatherhood and the safety of family over and above contact with gang members and their activities are indicative of identity reformation from that of gang member to family member. Identity reformation is closely linked to the need to belong; moving from active gang member to active family member as father, son, brother or stepfather provides a space to realize both. Identity reformation in this respect does not prioritize seeking redemption for past sins or repairing the 'spoilt identity' by seeking to throw off the shackles of stigma; rather, it speaks to the active pursuit of establishing a reformed identity by seeking belonging within their family and appropriate prosocial groups. Search for and achievement of a sense of belonging is key to understanding the myriad of pathways to desistance; the need to belong and the need to be seen to belong are vital.

For example, according to Berger *et al*. (2016),[37] '...[an] important factor that reportedly helped our participants to uphold their decision to exit the gang and to finalize their transition process was adopting a new identity by joining prosocial organizations such as faith-based groups, self-help groups, and gang prevention agencies. This experience provided [these participants] with a sense of belonging and social support...several

gang members consolidated their transition and change of lifestyle by adopting a more normative family lifestyle [in this case having a partner and being a stepfather]...' (p. 10).

Seeking identity reformation and a sense of belonging through joining a faith-based group was the central theme in the study by Flores (2009).[50] This was an ethnographic study undertaken with ex-gang members who had joined the Victory Outreach church. As Flores points out '...Victory Outreach is a space where race/gendered stereotypes in dominant society are challenged...' (p. 1006). This challenge to dominant stereotypes would appear important in post-exit validation, as it provides a space where former gang members can disentangle themselves from the image that people had of them when they were in gangs. As Flores (2009)[50] points out, '...messages from the Gospel are embedded in stream-of-thought prayers, songs and sermons, challenging dominant perceptions of barrio gang members and drug addicts as lacking compassion and lacking the ability to change...' (p. 1006).

It could be argued that participation in a faith-based group supports post-exit validation in at least two ways. One, it demonstrates in a very visible way that positive change can occur and this is often validated by the presence of others in the group. According to Flores (2009),[50] '... many in the congregation clapped and cheered loudly, validating [the] claim that one can change from expressing a deviant barrio masculinity to a reformed barrio masculinity...' (p. 1007).

Using the construct developed by Flores (2009)[50] of '*religious optimism*', we infer that former gang members validate themselves internally through their belief that God will help them to achieve upward mobility and attain the trappings of conventional life, e.g. a job, a house. Flores explains this idea thus: '...I will coin the term religious optimism to describe both low-income non-immigrants and second-generation immigrants with disadvantaged origins, a disciplined work ethic and lofty goals...thus persons who survive the most negative aspects of a disadvantaged upbringing... may actually later feel hope in becoming upwardly mobile...' (p. 1007).

Achieving a sense of belonging was evident in the reporting of the way the elders in the church welcomed the opportunity to take the younger ex-gang members under their watch and guide them towards a re-evaluation of their street code. For example, according to Flores (2009),[50] '... established members [of the church] role modelled appropriate behaviour for newer members...' (p. 1009). These elder members acting as mentors promoted and encouraged new members '... not to have extra-marital affairs... [to achieve consistent positive parenting]... [And] to quit selling drugs in order to set a better example for younger siblings...' (p. 1009). This is a good illustration of where ex-gang members became part of a prosocial group and were exposed to new values and the potential to reform their identity. A further illustration occurs in the account by Flores (2009)[50] who cites the case of Marcelo, a 20-year-old second-generation Mexican-American who had lost his privileges to see his son when he was in gang life. He was now clean from drugs for four years and involved in church activities, had secured a new job with higher pay and the courts had granted him custody of his son on weekends. Many of the former gang members had secured jobs mainly through their social networks with other members of the Victory Outreach church. As Flores (2009)[50] points out, '...the work ethic that the established Victory Outreach members seek to impart to newer members has positive effects upon their occupational and earning attainment...' (p. 1011).

The concept of the work ethic is important in understanding how ex-members derive meaning from their participation in faith-based groups. The data from this extensive analysis by Flores (2009)[50] suggest that it is not just for religious and spiritual reasons that ex-gang members join faith-based groups; we infer from the data that ex-gang members are encouraged by the elders to perform 'work' on their identity, their values, their family and their place in the community. This work is vital in reforming their identity and helping them to achieve a new sense of belonging; in addition, this work replaces the time and effort they invested in gang-based activities where the demands to perform various types of 'work' are ongoing.

In an increasingly secular society, it may not seem the 'cool' thing to do for ex-gang members to join faith-based groups; however, to understand this decision from within the binary exchange between secularism and religion is to miss the point. The point is that ex-gang members are not just seeking a religious experience; they are also seeking to reform their identity and achieve a sense of belonging to replace what they once sought in the gang culture. As Flores points out, '...all respondents reported being

drawn to the cultural style of Victory Outreach due to the sense of belonging it offered. An intense, spiritual relationship with God, cloaked in an urban masculine, barrio style, replaced the sense of belonging members once experienced with gangs…'.

Further examples of how ex-gang members sought to reform their identity and achieve a sense of belonging were identified in the studies by Deuchar *et al.* (2016),[63] Moloney *et al.* (2009)[56] and Sogaard *et al*. (2015).[59] For example, in the study by Deuchar *et al.* (2016)[63] with ex-gang members who had joined a local gym, it was reported that '…the gym served as masculine space where men, eager to change their lives and leave local street gangs, could engage in male bonding and try to build new and more prosocial forms of male relationships… the young men explained how they enjoyed the camaraderie gained from hanging around in a safe space with groups of guys who they had grown up with and trusted…' (p. 734).

Seeking identity reformation and a sense of belonging through reforming their masculine identity was also quite apparent among participants in the study by Sogaard and colleagues (2015).[59] These participants expressed a desire to pursue mainstream goals such as securing legitimate employment; something they closely associated with reforming their masculine identity. According to Sogaard *et al.* (2015),[59] '… For the young men we encountered, getting a job and a steady income was assumed to be crucial to their reformatory process… Interviews also showed that many of the young men had started to re-orient their identity formation towards work even without having obtained any…from the perspective of our informants, employment seemed to offer both economic as well as symbolic benefits such as opportunities to achieve status and display to others that they were making positive changes in their lives. Narratives about work-related experiences, hopes and dreams were, however, also central to how the young men tried to construct reformed masculine identities…' (p. 12-13).

The analysis by Sogaard and colleagues (2015)[59] in highlighting how ex-gang members framed their post-exit experience around reforming their masculine identity and pursuing mainstream employment reiterates our earlier point about the importance of the work ethic to former gang members in their quest for post-exit validation. As illustrated in the work by Flores (2009), Deuchar *et al.* (2016), Moloney *et al.* (2009), Halsey *et al*. (2016) and Sogaard *et al.* (2015), the pursuit of mainstream employment is of paramount importance to former gang members.[50, 53, 56, 59, 63] We infer from the data that it is both the pursuit and the achievement of formal employment that are key to understanding the importance of the work ethic in the lives of former gang members. We also infer that the work performed by ex-gang-members on their identity and their quest to build prosocial relations also forms a key part of the work ethic. It is through the work ethic of joining prosocial groups and pursuing prosocial values both symbolically and materially that former gang members can demonstrate the visible manifestation of behaviour change and identity reformation; these are key indicators of change often required by the wider community to demonstrate the validity of claiming to be an ex-gang member.

The study by Sogaard *et al*. (2015)[59] provides further illustration of the steps that ex-gang members take to perform voluntary work as a means of demonstrating their intent to pursue the work ethic required to establish a reformed identity and a new sense of belonging. For example, Sogaard and colleagues (2015)[59] report that '…many of the young men at New Start either aspired to or were involved in forms of mentor work, and often times they drew on what we call a "wounded healer narrative" in their attempt to construct reformed masculinity…' (p. 13).

Being recognized as a 'professional-ex' and a healer allowed the young men to construct prosocial conceptions of their identity. They were encouraged to provide crime-prevention talks and presentations at local schools and institutions and senior members were recruited as boxing trainers and mentors. They were given responsibility and an opportunity to demonstrate their efforts to reform their identity. According to Sogaard *et al.* (2015),[59] '…Interviews showed that this "employment" involved a strong form of social control… that seemed to underpin their reformatory processes…' (p. 14).

This informal employment opportunity also provided ex-gang-members with a space to demonstrate 'appropriate masculinity' which was seen as the norm for their age. Indeed, many of the participants aspired to the mentor position which according to Sogaard and colleagues (2015),[59] '… by so doing they were able to re-craft themselves

in a positive light, reinforce their own sense of reforming and to construct an identity as mature men involved in responsible nurturing and guidance of "younger generations"... (p. 14).

The young former gang members in the study by Sogaard *et al.* (2015)[59] were acutely aware of the important values that the wider society promotes; values such as achievement, individual responsibility and the pursuit of monetary success. These values are very much linked to securing meaningful employment and for men are often part of appropriate masculine identity. For example, according to Sogaard and colleagues (2015),[59] '...the young men also drew on an "achiever narrative" in their attempt to construct a reformed masculine identity...emphasizing individual responsibility and the possession of skills and monetary successes, in the young men's attempt to construct a desired masculine self-identity as reformed and successful...' (p. 15).

Pursuing and engaging in work, both informal voluntary work and formal mainstream employment, is a useful way to provide distance between former gang members and the ongoing activities of the gang. In the study by Moloney *et al.* (2009),[56] achieving this distance was important to achieve desistance. According to Moloney and colleagues (2009),[56] '...most respondents who most fully desisted from crime and began to rely on formal work are also those who began to spend the least time with their fellow gang members... This withdrawal from the street and the gang is fundamental to desistance...' (p. 319).

Moloney *et al.* (2009)[56] also talk about the concept of 'knifing off' from gangs. In some cases this concept is understood to refer to the gang member cutting ties with the gang. However, as Moloney and colleagues (2009)[56] point out, this decision is very rarely taken in isolation from the wider contingencies that impact on the lives of gang members, including the need to belong within social relations and the need for employment and the accompanying social status that having a job will bestow. According to Moloney *et al.* (2009),[56] '...knifing off from the gang seems to be key for those who successfully desist. But, knifing off successfully may be dependent on finding new sources of respect and strong identity based on fatherhood, on newfound work status and/or in a relationship...' (p. 319).

To understand the importance of the work ethic in reforming identity and building prosocial relations, it needs to be seen as the key to former gang members in actualizing their personal agency. Performing 'work' is the means by which former gang members can claim to be causal agents in their own reformation and demonstrate the visible manifestation of change to their wider prosocial grouping with which they seek a renewed sense of belonging. The centrality of work and its accompanying benefits to desistance is neatly encapsulated in this extract from the study by Halsey *et al*. (2016),[53] who also introduce the notion of frustrated desistance. According to Halsey *et al*. (2016),[53] '...Participants explained how sustaining success was closely linked to earning an income, with failure aligned to receiving handouts, or worse, no income at all... [these participants]... located their frustrations in their inability to experience themselves as cause—to be the men they wanted to be, to provide for their families and for themselves. For both, this led to their demise...' (p. 6).

Despite the amount of work that former gang members performed on reforming their identity and building relations with prosocial groups and adopting prosocial values, the data would suggest that in some cases in some cases these attempts are insufficient to overcome the obstacles to achieving their goals. For example, Sogaard and colleagues (2015)[59] point out that '...Although several of the young men made use of the "achiever narratives", interviews also revealed that some of the young men experienced great difficulties realizing this ideal...' (p. 15).[59] These frustrations and lack of tangible progress beyond the ex-gang member image can often result in what Sogaard *et al*. (2015)[59] call a 'crisis of masculinity' with a real risk of becoming 'masculine failures'. According to Sogaard and colleagues (2015),[59] '...this can lead individuals to engage [or re-engage] in problematic and criminal behaviour to re-establish a masculine sense of self...' (p. 17). This return from desistance to gang-related criminal behaviour to achieve a sense of personal agency is also explored and extensively discussed in the study by Halsey *et al*. (2016).[53] We will now review the extensive analysis by Halsey and colleagues in their articulation of this return to crime and gang culture under two subheadings: derailing desistance and sabotaging desistance. The former emphasizes the failure of state agencies to recognize and support the incremental struggles encountered by former gang members in their efforts to desist from crime and gang-related

activity. The latter prioritizes the internal reasoning of former gang members in their quest to become active agents in their own transformation and the frustrations they encounter.

## Derailing desistance

It is well acknowledged in the literature that people desisting from gangs and gang-related activities need support from within their community; sometimes this support is provided by probation and welfare officers who seek to support the integration of ex-prisoners with experience of gang-related life. However, the nature of this support came under scrutiny in the study by Halsey and colleagues (2016),[53] who drew attention to the communication breakdown between their interviewees and correctional officers who were supposed to be the supporting agents. Halsey and colleagues point out that for their participants '...Meeting the plethora of parole conditions is just one aspect of desisting from crime. The hardest part is knowing when and whether to speak up about emerging problems. In an era where community correctional officers privilege the compliance aspects of their role over and above the therapeutic dimension (i.e. the giving of encouragement and practical support), prisoners and parolees have learned that confessions of "weakness" or intimations of setbacks (especially drug use) are likely to be used against them. This created a difficult situation for many of our interviewees, whereby honesty was rarely the best policy...' (p. 7).

This apparent lack of trust on the part of the participants to share with their correctional officers the nature of their real struggle with desistance stems in part from the model of intervention that correctional officers are seen to work from within — a model generally known as the 'risk-aversion' model. This model is premised on the basis that it is the job of the correctional services to monitor and emphasize the risk factors associated with offenders and thereby seek to reduce these risk factors, e.g. drug use, associating with known criminals or displaying antisocial tendencies. While such programmes may play a role in criminal correctional work, they are often prioritized over work that acknowledges the efforts by ex-gang members to desist from crime and gang-related activity. According to Halsey *et al*. (2016),[53] '...Instead of strengths being acknowledged and built on, deficits are too often mined such that many find themselves subject to further restrictive controls or fast-tracked back to custody. Here, the dead hand of risk aversion strangles any semblance of progress in desisting from crime. This is arguably why many would-be desisters refuse to recount openly (and in a timely way) to state employees what is actually occurring during their period on parole (or similar order)...' (p. 8).

When participants did muster up the courage to display their vulnerable moments to their corrections officers, the response forthcoming from these encounters was mixed; some participants received and benefited from support, while others experienced a lack of support. According to Halsey and colleagues (2016),[53] '... these communication breakdowns between criminal justice professionals and clients were not purely the result of individuals being unable to tell parole and probation services about particular problems. Indeed, across all three data sets, it was the lack of responsiveness from such services when a problem had been communicated that ramped up feelings of frustration and sowed the fatalistic seeds... However, in the US data set, there was evidence among those who reoffended that when parole officers responded to infractions with a light hand—mandating rehabilitation rather than recall—this could pull people back from the brink and help them regain hope, reengage with their desire to desist and reinvest their efforts in the struggle this involved...' (p. 8).

## Sabotaging desistance

Halsey and colleagues (2016)[53] make a number of inferences from their data on what may drive a person back to crime and gang-related activities and thereby obstruct their desistance. They argue that when desisters experience difficulties in communicating their vulnerability and, when they do communicate they receive little support, that these are crucial encounters which very often re-turn the would-be desisters towards contemplating crime and gang life. According to Halsey and colleagues (2016),[53] '...It was in these types of scenarios—where obstacles began mounting, and where having worked up the courage to confide in an individual or organization, a distinct lack of responsiveness ensued—that fatalistic and self-sabotaging reactions were most likely to occur...' (p. 9).

Chief among these reactions from former gang members was the contemplation of a return to crime as a means of exerting control over their lives and to counteract their feelings of

helplessness and frustration while their efforts to desist from crime went unrecognized. According to Halsey *et al.* (2016),[53] '... Our participants unquestionably attested to feeling boxed in with few options for escape...they also described crime (reoffending) as restoring order in their lives...' (p. 11).

It may well seem inconceivable to the outside world that ex-prisoners and ex-gang members may contemplate a return to crime as a means of exerting personal agency. However, most of the participants in the study with Halsey and colleagues suggested that they experienced exclusion from mainstream social, cultural and economic life; they had spent time in prison for various offences, and their efforts at desistance had for the most part gone unrecognized by state officials. Against this background, Halsey and colleagues (2016)[53] argue that: '...While such acts of 'self-sabotage' may not always make sense to the outsider, our data suggest they are manifestations of the pain and angst experienced by ex-prisoners who feel the need to repress the real dimensions of their struggles. However, these complex emotions do not quietly fade away. Instead, they are channelled into and through particular actions. Our contention is that [these] moments are concrete demonstrations of people attempting—through crime—to temporarily overturn the precariousness of their situation through returning to a realm in which their agency can be actioned...' (p. 9).

If it remains a key objective of the rehabilitation and correctional agencies to encourage and facilitate former gang members to demonstrate reform and pursue the values and rules of mainstream society, then the analysis by Halsey and colleagues is useful in illustrating the distance between these objectives of state agencies and the experiences of former gang members during their encounters with frustrated desistance. As Halsey *et al.* (2016)[53] point out, '...Our participants were often scathing of the mainstream moral order—an order that sought their compliance over and above their inclusion in social, economic and cultural life. For them, there was more "morality" in the cut and thrust of the street and criminal life. The infraction, therefore, was not an attempt to reclaim their place in a desired moral world so much as a device for taking control of their exclusion from it, thereby ending their current turmoil. This is one reason why those well down the desistance path sometimes self-sabotage their hard-won success and return to what they know best...' (p. 13).

Furthermore, Halsey and colleagues (2016)[53] make a useful point when thinking about designing interventions to support desistance; they state that: '...Too often, the system of community supervision—when calculating success—fails to ascribe sufficient weight to client reductions in severity and frequency of offending. From a public safety perspective, this makes little sense. If desistance as process was properly understood, most communities would tolerate technical breaches committed in the context of overall improvement in the desistance journey...' (p. 7).

### 4.4.3 Quantitative study findings and analysis

Eight quantitative studies were identified for inclusion in the synthesis. These peer-reviewed primary studies were brought forward for inclusion, as they examined quantitative data on young people (aged 10–19 years) or young adults (aged 20–29 years) who have been involved in gangs or gang-related criminal activity relating to their desistance or disengagement from gangs, gang status or gang-related crime. The eight studies draw on seven unique data sets; six studies draw on three data sets; two studies use a sample selected from the National Evaluation of GREAT II; two studies use the same sample from the Pathways to Desistance study; and two studies draw their samples from the ADAM Programme (Arrestee Drug Abuse Monitoring Programme). Four of the studies use data from school-based samples[46, 54, 55, 80] and four use data from detention samples.[48, 58, 72, 75] With the exception of three studies that use cross-sectional data,[48, 72, 75] most of the studies use panel data with repeated measures over time, allowing examination of factors associated with changes in gang membership status. In general, included studies examined motives, methods, and consequences of desisting from gang involvement, how these vary by one's embeddedness within gangs or the extent to which one maintains ties to the gang, or how desistance from gangs relates to desistance from offending.

Pyrooz and Decker (2011)[75] conceive of desistance from gangs as a process characterized by the declining probability of gang membership, and operationalize desistance as the de-identification of gang membership. Carson *et al*. (2016)[46] highlight the conceptual challenges in determining *who* is a former gang member and *when* they become a former gang member, pointing to distinctions between *de-identification* (no longer identifying oneself as a gang member) and *disengagement*

(severing of ties) and the debate about whether both are necessary. Moreover, Carson *et al.* (2016)[46] highlight the debate in the literature about whether gang intervention should target desistance from *gangs* or desistance from gang *crime*. To some extent the quantitative data are limited in their examination of gang desistance due to the challenges of operationalizing and measuring these issues that do not yet have clear conceptual definitions.

Using the quantitative studies identified for inclusion in this synthesis, we conducted a narrative synthesis to code, analyse and synthesize study findings using the four constructs of Ebaugh's role exit theory as the best fit framework: first doubts, seeking alternatives, turning points and post-exit validation. The identified quantitative studies provided little substantive data to support the first three constructs in this framework, but provided considerable data relating to the post-exit validation phase. This may be largely because the aim of most of these studies was not to examine the process of desistance, but rather the impact of desistance on involvement in delinquency or crime. Three key and related constructs emerged from the data relating to the post-exit validation phase: persisting ties to one's former gang, concerns about violence, and role residual. The data relating to these constructs are summarized below.

## Persisting ties

To interrogate the data on persisting ties, we asked the following questions: 1) What drives the persistence of ties to the gang? 2) What drives the washing away or cutting of ties to the gang? 3) What are the consequences of persisting ties to the gang? When an individual leaves their gang, and is seeking validation of their new status as a former gang member, they can experience countervailing pressures to return to gang life or gang-related offending; one such pressure results from social or emotional ties to the former gang. Four quantitative studies consider the role and impact of persisting ties to the gang in the post-exit phase. Persisting gang ties are defined as the extent to which a former gang member retains social or emotional ties to the previous gang network. It is measured using a six-item index, which includes whether or not the former gang member has hung out with members of the previous gang, has worn gang colours, has drunk or got high with members, has flashed gang signs, would respond if the gang was disrespected, or would retaliate if a member of the former gang was hurt,[72, 75] or a two-item index using the latter two items (respond if gang disrespected, retaliate if gang member hurt).[48] In this section we examine the consequences of persisting ties to the gang during the post-exit phase and the factors that drive retaining or cutting ties to one's former gang.

Persisting social and emotional ties to one's former gang are the key that may facilitate a former gang member's continued involvement in criminal activities, both as offender and victim.[75] Moreover, persisting ties may signal a greater risk of relapse into gang-related offending.[48]

In a sample of 84 arrestees who identify as former gang members, Pyrooz and Decker (2011)[75] examine the role and impact of persisting ties in terms of violent victimization and serious offending and find that those who retained ties were at least twice as likely to be victims of violence or to be arrested for serious offences, relative to those who cut all ties to the gang, regardless of how long ago they had left the gang.[75] Using the same data set, Pyrooz *et al*. (2014)[72] found that for each one-unit increase in the index of gang ties, there is a 20% increase in violent victimizations. Moreover, they argue that for a former gang member, maintaining gang ties is more important in predicting violent victimization than the level of gang activity within the former gang member's neighbourhood or how recently they desisted from the gang.[72]

From the literature reviewed here, there were four factors that drove the maintenance of ties to one's former gang: loyalty, social or emotional needs, proximity and time. The two-item measure of persisting ties measured willingness to respond or retaliate if a former gang member was disrespected or attacked. This willingness to respond or retaliate is driven by a continued sense of loyalty to the gang that remains strong even after de-identifying as an active gang member.[75] Former gang members reported an average of more than two ties to the gang, with more than half reporting an emotional tie, despite having been separated from the gang for nearly two years. This suggests that these ties may be fulfilling a social or emotional need for connection or belonging. On the other hand, some may find it challenging to cut ties to the gang due to close geographic proximity, which can make nearby associations difficult to avoid. Pyrooz *et al.* (2014)[72] suggest that as neighbourhood gang activity increases, the number of ties a former gang member in that neighbourhood retains significantly increases.

Lastly, time since leaving the gang may influence the extent to which one maintains ties to their former gangs. There appears to be a negative correlation between time since leaving the gang and ties to the gang, such that the shorter the time since de-identification as an active gang member, the more ties to the gang an individual is likely to have.[75] This suggests a process of attrition over time.

Ties to the former gang may be *cut*, implying an active decision and abrupt process, or *washed away*, implying a more passive and gradual process; the washing away was predominantly reported in the literature reviewed here. The number of ties to one's former gang decreased as the number of months of desistance increased. For each one-month increase in the length of gang desistance, there was a corresponding 3% decrease in the number of gang ties, which equates to a reduction of between 30% and 50% in gang ties after the first and second year of desistance respectively.[72] With time, former gang members became less willing to incur punishment for the sake of one's peers[55] and were also less likely to experience violent victimization. Specifically, Sweeten *et al.* (2012)[78] found 'statistically significant within-individual effects ... [suggesting] as individuals move out of gangs they tend to have fewer friends, fewer antisocial peers, less unstructured routine activities, more temperance, and less victimization' (p. 486). These data point to shifting friendship networks and less victimization over time as ties are *washed away*.

Embeddedness refers to the strength of network ties, the centrality of the individual within the network, level of involvement in crime, isolation from prosocial networks, positions of leadership within a deviant network, and adoption of deviant values and identities.[58] It is measured using a five-item index, including: frequency of contact with gang, position in the gang, importance of the gang to the respondent, proportion of friends in the gang, and frequency of gang-involved assaults.[58] The more embedded one is within the network of the gang, the more delayed their desistance attempts will be and the more likely they will be to maintain ties once they do disengage. Pyrooz *et al*. (2013)[58] found that greater embeddedness within a network, such as a gang, was associated with longer lengths of association. Pyrooz *et al.* (2014)[72] found that higher levels of embeddedness while an active gang member were associated with greater persisting ties on leaving the gang and while embeddedness decreased as the number of years since leaving the gang increased, the relationship between embeddedness and persisting ties remained. Moreover, higher levels of embeddedness were associated with persisting concerns about violent victimization.[58]

## Role residual

For some former gang members it was easier to reform their identity than others. Four of the included quantitative studies speak to the concept of 'role residual' in the post-exit phase. As described by Ebaugh (1988),[110] 'role residual is the identification that an individual maintains with a prior role such that the individual experiences certain aspects of the role after he or she has in fact exited from it. We can think about role residual as "hangover identity", i.e., as aspects of self-identity that remain with an individual from a prior role even after exiting' (p. 173). For example, Melde and Esbensen (2014)[55] used six waves of panel data on gang-involved youth to examine the impact of gang joining and exiting on delinquency trajectories. They found that 'gang membership can have an enduring impact on involvement in delinquent activity, but also on attitudes, emotions and unstructured activities associated with a higher risk of offending. Youth remain more at risk of antisocial behaviour after leaving the gang than they were prior to joining such groups' (p. 350). These data point to the enduring impact of gang involvement on attitudes, emotions and behaviours. Although this impact diminishes on leaving the gang, former gang members continue to experience aspects of gang life even after leaving. This finding was echoed by Pyrooz and Decker (2011),[75] who found that despite having left the gang almost two years previously, former gang members had not left the whole life behind and were still involved in serious violence and risky social environments. Decker *et al*. (2014)[48] interviewed 260 former gang members and found that those who were more embedded in their gangs prior to leaving had greater role residual, including concern about violence to themselves or their family, and were more likely to respond in retaliation for disrespect to or an attack on their former gang.

## Concerns about violence

A recurring construct in the quantitative gang desistance literature reviewed here related to *concerns about violence* in the post-exit phase. To interrogate the data on concerns about violence, we asked the following questions: 1) What drives the concerns about violence? 2) Who is the actual

or potential target of this violence? 3) Who is the perpetrator? The violence of concern can be either the ritual violence that desisting gang members may experience when they leave the gang, or the ongoing threat of victimization, whether personal (targeting the former gang member) or vicarious (targeting their friends and family), that may remain with the former gang member during and after they desist.

The methods of desistance, or how one leaves the gang, can be described as active/hostile or passive/non-hostile. Active methods typically involve some form of ritual violence, such as getting beaten out of the gang or having to commit an offence, while walking away is typical of a passive method. How one leaves the gang, whether by hostile or non-hostile methods, is very context specific, depending on the norms of the particular gang, and the desisting member's position within the gang, and the reason for one's desistance (i.e. push or pull factors). Pyrooz and Decker (2011)[75] estimated that 20% of the former gang members in their study experienced a hostile departure. These hostile departures may be more common among those leaving more organized gangs[72] and among those who left the gang due to push factors (i.e. because they grew tired of the gang lifestyle or to avoid further trouble or violence associated with gang involvement).[75] Almost half of the former gang members in the study by Carson *et al*. (2016)[46] reported experiencing some consequence of their desistance and this was most often being beaten out by their former gang's members – an active/hostile departure method. Of those who reported some consequence of their desistance, violence was the most commonly reported consequence for both core and fringe gang members, across sex and race/ethnicity.[46] For some, this exit price appears to be a price worth paying, while for others it may pose a barrier to desistance. While ritual violence on leaving may not be the norm, Pyrooz and Decker (2011)[75] argue that it is sufficiently common to generate fear to dissuade would-be desisters.

Concerns about the ongoing threat of violence, to oneself or one's friends and family, are pervasive during active gang membership and are enduring for former gang members.[48, 58, 75] Concerns about violence to oneself, one's friends or one's family were a commonly reported source of first doubts and motive for desistance. Pyrooz and Decker (2011)[75] estimate that approximately two out of three former gang members in their sample reported exiting gangs to avoid the violence and trouble associated with continued gang involvement. This finding was echoed in the panel data of Carson *et al*. (2016),[46] which suggested that violence to themselves or significant others (friends or family) was the second most common motive for leaving the gang, with peripheral or fringe members most commonly reporting leaving the gang for reasons associated with violence. While concerns over threats to oneself and one's family or friends decline with time since desisting,[48] former gang members face continued concerns about violence, even after they have de-identified as active gang members, as others fail to recognize that they are no longer active gang members. One-third of former gang members reported continued attacks by their own or rival gang members and three-quarters reported continued police gang-related harassment after leaving the gang.[48]

### 4.4.4 Synthesis of the analytical themes

From our review of the qualitative and quantitative studies we examined on desistance from gang membership, we have identified two analytical themes, one of which is proposed as a middle-range theory of what causes former gang members to desist from gang-related activity. This theory is very much a working hypothesis based on our review of a cohort of studies within the literature; it is a theory that will require further testing and refinement to explore its usefulness in understanding the process of desistance. Our theory is only applicable to understanding the process of desistance from gang membership, as this was the primary focus of our work; the theory is therefore not robust enough at this stage to provide insights into desistance from crime in general.

The first analytical theme, role reappraisal, relates to the reappraisal of the role as gang member and the relationship with the gang. This theme includes data from our analysis of the qualitative studies on first doubts and turning points, as we argue that there are relationships between these constructs and that the data speak to the process of role reappraisal on the part of the gang member contemplating an exit strategy. This theme is also supported by data from the quantitative studies, which showed that concerns about gang-related violence feature prominently in the reappraisal by gang members. The second analytical theme relates to what we call 'desistance work' and is

the main plank of our middle-range theory on desistance. This theme is based on our analysis of the qualitative data on seeking alternatives and post-exit validation.

### Role reappraisal: reappraising membership of a gang

From the quantitative and qualitative studies we reviewed, it would appear that the desistance process of former gang members includes a reappraisal of one's role as a gang member and specifically an appraisal of the costs and benefits to oneself and one's family. This process of reappraisal can be prompted by the accumulation of doubts and disillusionment about gang-related activities; recognizing obligations to their family and becoming a father also feature in the role reappraisal. Concerns about or experience of gang-related violent victimization, either personally or vicariously through one's friends or one's family, was a prominent feature in a number of studies we reviewed. These concerns about gang-related violence appear to be key drivers of gang members reappraising their role as a gang member; however, in most of the studies we reviewed, the concerns about violence were reported by the authors but rarely developed. For example, there was scant discussion about whether gang members wishing to exit the gang had committed or commissioned violent acts themselves, how they may have felt about this violence, and if the desire to exit the gang was in any way linked to concerns about their own violent past. There was also scant discussion on the potential links between getting older and potentially maturing and a shift in values away from violence, and the implications of this potential linkage for our understanding of desistance. Nonetheless, concerns about gang-related violence would appear to play a significant role in gang members' reappraisal of their role as a member of the gang; however, further work is required to investigate this issue.

Recognizing obligations to the family and becoming a father also featured in the role reappraisal of gang members. In some studies, family obligations and fatherhood were mentioned as turning points for gang members that led to their decision to exit the gang. However, the authors report these associations without developing them, so it is difficult to understand what brought about the shift in obligations from the gang to the family and what these changes mean to the desistance process. For example, in some of the studies reviewed, there appears to be a lot of activity and change occurring within the family unit of the gang member, but the family unit is rarely unpacked in the studies and to some extent remains a 'black box'. On the one hand, the authors tell us that the family is an important 'hook' for change, but there is scant discussion on what mechanisms within the family unit may be driving change among gang members wishing to exit the gang. Nonetheless, the family unit and fatherhood (for male gang members) are key features of the role reappraisal of gang members; however, further investigation is needed in order to understand these issues in greater depth.

### Performing 'desistance work' to reform personal identity and secure social belonging

In most of the studies we reviewed, the authors wrote about gang members reforming their masculinity, pursuing formal employment, performing fatherhood and joining prosocial groups; these constructs are highlighted in the literature as important to desistance, but rarely is there any attempt to establish relationships between them. Our analysis and interpretation of these data infers that these constructs are related and form an iterative process of 'desistance work' undertaken by former gang members to reform their identity and secure social belonging. Desistance work is primarily based on the personal agency of the gang member, which means that the person in question is the primary causal agent in their own reformation. This work is grounded in the reasons and motivations held by the gang member. Desistance work is also active, visible, and grounded in social action.

From the studies we reviewed on gang members seeking alternatives to gang membership and seeking post-exit validation for their decision to exit the gang, it is apparent that former gang members invested heavily in reforming their personal identity through pursuing prosocial values (such as volunteering to help young people to avoid criminal activities, securing a stable job, getting married and having children) and seeking alternative sites of belonging among prosocial groups (such as their family, faith-based groups, local gym and/or place of employment). We infer from the data that they undertook this investment through performing 'desistance work' on themselves and their social relationships. This is not work that is solely confined to their cognitive and emotional selves; it is also played out within a myriad of social encounters with their former gang members, their families, prosocial

groups and state agencies. It is work that when welcomed, recognized and supported by family and prosocial agents can flourish and contribute to prolonged desistance. However, when this work goes unrecognized by law enforcement (such as correctional or probation officers) and others, it can frustrate desistance, lead to derailment and a return to criminal activity. In essence, the bulk of this desistance work takes place within the internal reasoning of the individual, but importantly for former gang members, the visible manifestation of this work needs to be acknowledged by their community and law enforcement officials.

### *Masculinity reform as desistance work*

From the studies we reviewed, we identified four themes that describe the nature of desistance work undertaken by former gang members. Firstly, former gang members (male) sought to reform their masculinity through pursuing desistance from gang-related membership and activity. Among some of the studies we reviewed, it was considered masculine to be desisting from gang membership, which signalled a shift from when it was masculine to be a gang member. The theme of masculinity played an important part among former gang members when experimenting with roles outside the gang. Experimenting with their masculinity allowed them to frequent masculine spaces and acquaint themselves with prosocial masculine men. These efforts to reform their masculinity are a useful illustration of where former gang members acted as causal agents in their own reformation and in the process sought to build relationships with prosocial masculine peers. However, reforming their masculinity was rarely an isolated pursuit for former gang members; mostly they related their masculinity to their identity as fathers and as legitimately employed men, with a prosocial status that was acknowledged and welcomed by their community.

### *Value reform as desistance work*

Secondly, former gang members sought to pursue prosocial values as part of their desistance work. Central to those values was securing formal employment, which was related to their masculine notion of being a working man, a father and provider for their family. Securing formal employment also fulfilled a number of additional functions that helped in their desistance from gang-related activities, such as creating distance from the gang and providing opportunities to pursue personal interests. We infer from the data that pursuing and securing formal employment and putting temporal and spatial distance between themselves and the gang serve as visible manifestations of gang exit to their family and the wider community. In some of the studies we reviewed, former gang members were not just seeking employment for monetary gains: they saw employment and work experience in general as key to reforming their identity - an identity change they sought to validate both within themselves and in the eyes of others. We infer from these data that former gang members were acting as causal agents in their own reformation, and their reasoning was that combining the pursuit of work with a reformed sense of who they were as men would help them in their efforts to desist from gang-related activities. Former gang members also recognized the symbolic value in work as a means of making visible to others important changes to their lives. These changes provided the visible manifestation to others that change had occurred; not just internal change but change oriented towards social values shared by other prosocial beings.

### *Performing the obligations of fatherhood as desistance work*

Thirdly, former gang members invested quite a lot of effort in performing fatherhood as part of their desistance work. Becoming and acting in the role of father was closely related to their reasoning on reforming their masculinity and securing formal employment to provide materially for their family. In addition, performing fatherhood was related to family obligations and building and sustaining trusting relationships with a partner. For example, for some former gang members, a trusting relationship was formed when they spent more time in the family home – a decision that also helped to put distance between them and the social spaces occupied by gangs.

### *Identity reform as desistance work*

Fourthly, in the studies we reviewed, the work by former gang members to reform their personal identity was consistently related to their efforts to secure a sense of belonging within prosocial groups and within one's family. Relocation from gangs to seeking belonging in prosocial circles also served as a visible manifestation of change to others. For example, former gang members achieved validation for their decision to exit gangs by being welcomed into and supported by prosocial groups; this recognition provided them with the incentive to build on their transformation and extend their trajectory of desistance by reclaiming the normative lifestyle that resides within prosocial

groups. We infer from the studies we reviewed that former gang members joined faith-based groups to perform 'work' on reforming their identity as men, to learn new values to replace the values of their gang and those of the street code, and to make this desistance work visible to their family and their community. We contend that this work further illustrates how former gang members acted as causal agents on reforming themselves and their relationships with their family and the wider community. This desistance work is vital in reforming their identity and helping them to achieve a new sense of belonging; in addition, this work replaced the time and effort they invested in gang-based 'work'.

### *Threats to desistance work*

From the studies we reviewed, we identified a number of important threats to the desistance work of former gang members in creating a prosocial identity. Two constructs identified in the quantitative literature, *persisting ties* and *role residual*, point to a 'limbo state' in the desistance process where one de-identifies as a gang member, but still retains social or emotional ties to the gang and/or still engages in gang activity or crime. At this stage in the process, a desisting gang member has made the decision to leave the gang, but has not yet successfully relinquished ties to the gang and has not fully transitioned to a prosocial way of life. Persisting social and emotional ties to the gang threaten desistance by increasing the risk of becoming victimized and increasing the likelihood of being drawn back into gang-related activity, and generally signal a greater risk of relapse into gang life. Role residual describes the enduring impact of gang involvement on one's attitudes, behaviours and identity after leaving the gang.

This 'limbo state' is described in the qualitative literature as *role ambiguity* and represents the third threat to desistance work. Role ambiguity was described as a period of dual membership or a phase of 'teeter tottering' between attempting to build a new life and associating with their former gang members. It arises when individuals who are between gang and non-gang life contemplate alternative roles, while being reminded of the obligations of their role to the gang. Gang members pursue alternative roles, but are frustrated in doing so, on the grounds that society is not ready to acknowledge their transition from criminal gang member to a prosocial role. Role ambiguity threatens desistance work among former gang members in a similar manner as persisting ties and role residual. Role ambiguity describes how while performing desistance work, one's identity may remain caught up with the gang, loyalty to gang members may remain an important value for many, and many may continue to feel a strong commitment to demonstrate loyalty by backing up former gang members physically if these were in serious trouble. This role ambiguity prevents complete desistance, as the former gang member's willingness to help his/her colleagues can draw him/her back into gang life and reaffirm a gang member identity. Moreover, complete desistance requires the community to acknowledge the identity reform. During role ambiguity, the former gang member may be particularly vulnerable to relapsing into gang life.

Two additional and related threats to desistance work and identity reform emerged from the review of qualitative studies. The fourth threat, derailing desistance, describes the negative effect social services and criminal justice agencies can have on impeding the desistance work of former gang members by failing to acknowledge the effort or incremental successes towards desistance. The fifth threat, sabotaging desistance, describes the former gang members' frustration with the collective failure of social services, criminal justice agencies, the community and significant others to acknowledge desistance work, frustration with their continued social exclusion, and their return to gang-related criminal activity as a means of exerting control.

These five threats to desistance work and identity reform need to be considered in any approach to encouraging gang desistance. Greater understanding of the complexity of the ambiguous phase, in which one is neither fully in nor fully out of the gang, would be important for a thorough understanding of the nature of the desistance process and may point to unique opportunities for intervention to facilitate more timely and successful progression through the process. In the meantime, acknowledgement by social services and criminal justice agencies of the vulnerability of those undertaking desistance work, particularly during this ambiguous phase, and acknowledgement of the work invested by desisters in reforming their identity and seeking belonging could facilitate the desistance process at best and prevent sabotage at least.

## 4.5 Discussion

The middle-range theory developed from the studies we reviewed suggests that former gang members performed desistance work to reform their personal identity and secure social belonging. They invested in and undertook this work through pursuing prosocial values and seeking alternative sites of belonging among prosocial groups. Prosocial values include reforming their masculinity, securing formal employment and performing fatherhood; prosocial groups include faith-based groups and local sporting clubs. We infer from the data that desistance from gang-related activity is underpinned by the building blocks of desistance work; this work and the work ethic it entails are key to understanding how former gang members become causal agents in reforming their identity and securing a sense of social belonging. This middle-range theory is grounded in the principles of realist synthesis, which seeks to identify the generative causal mechanisms that lead to certain outcomes.

Performing desistance work is the means by which former gang members can claim to be causal agents in their own reformation while demonstrating the visible manifestation of change to their wider prosocial grouping with which they seek a renewed sense of belonging. Within the studies we reviewed, former gang members were active agents in their own desistance work, and even in some cases when their work was frustrated by adverse social reactions to their legacy as gang members, their capacity to perform work on themselves rarely abated.

The theory of identity change as a driver for desistance is well documented in the broader literature on desistance from crime. For example, according to Paternoster and Bushway (2009),[113] '...The theory of identity change... does not imply that conventional institutions change people but that desistance from crime is an intentional act of self-change, which is only later strengthened by structural realignments. Desistance comes about when persons are dissatisfied with their working self as a criminal offender and the preferences that are aligned with that identity and actively do something about it. In our theory, once the decision to change one's self is made, persons intentionally seek out conventional institutions such as legitimate jobs, stable marriages, and more conventional social networks. Agency plays a fundamental role in our identity theory...' (p. 1155).

The middle-range theory put forward in our synthesis may resemble, to some extent, the work of Paternoster and Bushway (2009).[113] However, our theory differs in one fundamental respect; we do not suggest that desistance from gang-related activity is primarily based on instrumental rational evaluation. Nor do we agree with Paternoster and Bushway (2009)[113] that offenders stratify the 'self' in an attempt to explain their behaviours to themselves. We found no evidence of either in the studies we reviewed.

We are not suggesting that former gang members do not weigh up their options or use their rationality to inform their decisions; however, our candidate theory based on the studies we reviewed suggests that desistance from gang-related activity cannot be explained as either one or a series of rational choices based on instrumental evaluation of options and consequences. The desistance work identified in the studies we reviewed is more iterative and was primarily shaped by the reasoning of individuals regarding themselves and the resources available to them. The reasoning of former gang members included considerations of their masculinity, their potential to perform fatherhood, their desire to pursue prosocial values, get involved with prosocial groups and hang out in prosocial settings, as well as their obligations towards their family. The reasoning of former gang members also included considerations of the persisting ties to the gang, the residual legacy of their role as gang member and their concerns about gang-related violence. All of these factors featured prominently in their struggles with desistance; it was not the case that former gang members deliberately threw off the identity of active gang member following a rational evaluation of their position and then pursued a new identity through exploiting new opportunities. While former gang members were the primary causal agents in the process of reforming their identity, this work was as much social as it was personal. For example, from the studies we reviewed, former gang members worked on adopting a new identity by joining prosocial organizations such as faith-based groups, self-help groups, and gang prevention agencies. Their desistance work was grounded in social action; it was as much acted out within prosocial contexts and settings as it was from within the former gang member.

In contrast to the work of Paternoster and Bushway (2009),[114] the work by Boudon (2003)[115] is more closely aligned with the middle-range theory developed in our synthesis. Boudon (2003)[115] sought to extend the rational choice theory by elaborating on the Cognitive Theory of Action (CTA) to explain aspects of human behaviour. Boudon (2003)[115] argues that '...the cause of an actor's actions and beliefs consists in the meaning they have for that actor...' (p. 14). We have inferred throughout our synthesis that masculinity, fatherhood, family, prosocial values and prosocial groups all carried specific meaning for former gang members. We infer that this meaning was derived from the work that former gang members could perform with these resources to reform their identity and achieve social belonging. In other words, these constructs can also be seen as resources through which desistance work was transformed into social action. According to Boudon (2003),[115] '...social action generally depends on beliefs; that as far as possible, beliefs, actions, and attitudes should be treated as rational, or more precisely, as the effect of reasons perceived by social actors as strong; and that reasons dealing with costs and benefits should not be given more attention than they deserve. Rationality is one thing, expected utility another...' (p. 17).

Recent work by Paternoster *et al.* (2015)[114] appears to acknowledge the shortcomings in applying a strict rational choice theory to explain desistance from crime. These authors, and rightly in our view, caution against the adoption of the social constructionist view that desistance from crime is mainly driven by social control theories, which emphasize the 'pull' of conforming and complying with mainstream social order. We would infer from the studies we reviewed that the need for social belonging on the part of former gang members should not be confused or conflated with social conformity or social compliance; we found no evidence in the studies we reviewed of former gang members being exercised by the need to conform or comply. On the contrary, we infer from the studies reviewed that former gang members were primarily active agents in their own quest for reformation and displayed scant evidence of being acted on by social controls. As Paternoster *et al*. (2015)[114] state '...both the strict rational choice theorist's ignorance of human beliefs and desires and the overly socialized social constructionist's perception that human power is due solely to social interaction can be overcome by expanding rational choice theory...' (p. 223).

In their efforts to expand on the strict reading of the rational choice theory, Paternoster *et al*. (2015)[114] draw on the work of Boudon (2003)[115] and his cognitive theory of action (CTA). According to Paternoster *et al*. (2015),[114] '...In this view, [Boudon's view] one's identity motivates action because it is the focus of preferences, tastes, desires, and beliefs...what Boudon would call strong reasons... one's identity as more individualistic than social and one which is the nucleus of strong reasons held by persons is consistent with the realist social theory view of identity...' (p. 223).

To claim that one's identity is more individualistic than social is not to overlook the important role that the social plays in identity formation. Drawing on the work of Archer, whose work also happens to reside in the realist school of thought, Dufour *et al*. (2015)[116] make the point that identities are located in environmental contexts that include one's socioeconomic resources and cluster of advantages (strong social networks) and disadvantages (minority status) and that there are structural limitations to the identity that one can forge. The kinds of changes in both their identity and their life made by criminal offenders are often constrained by structural barriers that are difficult to overcome even with a strong motivation to change. From the studies we reviewed, the key structural barriers were unemployment and difficulty with changing the perception of law enforcement agencies. However, these structural barriers did not appear to overly obstruct the nature of the desistance work being performed by former gang members, which suggests that personal identity reformation and social belonging can be pursued and achieved without idealized changes to structural obstacles.

A further important point is the distinction between personal and social identity. According to Dufour *et al*. (2015),[116] in their study on desistance from crime '...Our data indicate that personal identities change at a much slower pace than social identities. For our respondents, this process lasted approximately 4 years...' (p. 495). This finding reported by Dufour and colleagues (2015),[116] lends some support to our thinking that desistance work to reform personal identity is an iterative process; it can involve former gang members taking two steps forward and one step backward, and this process can take time. One may take on the social identity of being a father or being an employee, but the act or event of becoming a father or becoming employed is only part of the process. The former gang member must internalize this identity and

make it personal. They undertake this work through their internal reasoning and their reasons are grounded in the meaning they bestow on or derive from this experience. This line of thinking is neatly encapsulated in the following extract from Paternoster *et al*. (2015),[114] who point out that '… one's self-identity is very much a personal product achieved by intentional acting on the world, that is, engaging in practical activities with an emphasis on practical activity, praxis…' (p. 224).

In summary, the theory proposed here, based on our reading of the studies reviewed, is that former gang members desist from gang-related activity through performing desistance work. This work includes engaging with prosocial values and prosocial groups, which provide the resources to reform their personal identity and help them achieve social belonging. The former gang members in the studies we reviewed were the primary causal agents in their own reformation, and their engagement with the resources available to them was shaped by the meaning they derived from these resources and how they internalized this meaning. For example, we infer from the data that becoming a father is not necessarily a turning point in and of itself, but a resource with the potential for the former gang member to perform fatherhood, depending on how they reason with this resource. In other words, fatherhood will rarely lead to desistance in and of itself; however, if the meaning of fatherhood is significant enough to the former gang member, then it may provide a turning point to further changes, and prolong the desistance trajectory.

As we have identified in this review, desistance work is composed of many parts, and it is the potential for acting out these parts through social action that helps to engage the desister. In other words, it is the potential for desistance work to be performed in public spaces that gives it meaning. For example, former gang members in the studies we reviewed were able to act out their reformed masculinity in public through joining prosocial groups and engaging in prosocial activities; this visible manifestation of identity reformation served to illustrate to their community that they were making positive changes and also served to secure for them a new place of social belonging.

## A note on the limitations of our work

Firstly, our review of the literature on desistance from gang-related activity was confined to 21 studies. We only included studies which explicitly reported that the population under study was either current or former gang members and that desistance was an explicit focus of the study. This means that we excluded all studies which primarily focused on desistance from crime in the broadest sense, but did not mention gang-related crime. We acknowledge that there can be room for great overlap between gang-related activity and crime in general, and our decision to exclude studies not explicitly examining gang-related activity and desistance may have resulted in us missing some relevant studies.

However, during the review process, we did have reason to read a number of papers and reviews on desistance from crime in general, and it would appear that this literature is quite similar to the studies we reviewed in terms of the key constructs and theories reported. For example, the construct of ageing and maturing out of crime is mentioned as a possible theoretical lens through which to understand why one desists from crime in general. This construct did feature in the studies we reviewed; however, it did not appear to carry any significant meaning to the former gang members. On the other hand, becoming a father and reforming masculinity does feature somewhat in the literature on the discussion of crime and desistance, and both constructs featured prominently in the studies we reviewed and in our concluding theoretical elaboration of the gang-related literature. Similarly, identity change and pursuing prosocial activities feature predominantly in both bodies of literature, and we have dealt with both constructs extensively in this review.

Secondly, we only extracted data from the studies that were based on the author's descriptions and interpretations. This meant that in some cases the accounts presented by the author were primarily descriptive and did not include an interpretation of what these accounts meant to the former gang members in the study. In these cases, we needed to draw some inferences from the data and it may be the case that our inferences are not what were meant by participants. However, throughout our work we sought to minimize the number of occasions on which this may have occurred. We did this by reading and re-reading the studies until we were reasonably confident that our inferences matched the meaning held

by participants. On the other hand, most of the qualitative studies we included provided good rich and thick interpretations of what the activities under investigation meant to the participants, and all included studies were rated of moderate or high quality.

Thirdly, our middle-range theory, while grounded in the data from the studies we reviewed, is very much a working hypothesis of what we infer to cause former gang members to desist from gang-related activity. We acknowledge that this candidate theory is based on a small cohort of studies within the literature and will require further testing and refinement to explore its usefulness in understanding the process of desistance. Furthermore, we would contend at this stage that this theory may only be useful in understanding the process of desistance from gang membership and may not yet be robust enough to speak to desistance from crime in general. We suggest that it may be the case that leaving and desisting from gangs is different from ceasing and desisting from crime in general. For example, people may join gangs for reasons other than the opportunity to commit crime, such as making friends and seeking to belong; the studies on persisting ties illustrated this possibility.

Furthermore, the elaboration of our theory is based on the data we extracted and interpreted from the constructs of seeking alternatives and post-exit validation, which formed two of the categories of the best fit framework used to deductively analyse the data. This deductive analysis, coupled with inductive analysis that generated additional constructs to our *a priori* categories, only deals with two of the four categories that comprised our *a priori* framework. Therefore, the case may be made that our theory is not a complete elaboration of the role exit process that constitutes desistance from gang-related activity. However, it must be noted that the data we retrieved from the included studies that speak to first doubts and turning points – the other two categories of our *a priori* framework – were primarily descriptive and did not contribute to an explanation of what causes former gang members to desist from gang-related activity. The data describe some of the concerns that former gang members had around their role as an active gang member which led to their reappraisal of this role, and we suggest that this is an area that requires further understanding and investigation. Finally, we acknowledge that our earlier claim, that our theory is closely aligned with the realist thinking of Boudon (2003),[115] may be critiqued. We may be accused of not accounting for the role of context in our elaboration of the theory. We agree that a more detailed and in-depth review is needed to identify context, mechanism and outcome configurations, and a larger cohort of relevant studies is required for this work. We are not claiming to have undertaken a realist review; however, we are saying that our synthesis of the data on desistance work constitutes a candidate theory of what causes former gang members to desist from gang-related activity and that this theory is close to the realist thinking of Boudon. Like Boudon (2003),[115] we suggest that based on the studies we reviewed, former gang members are the causal agents of change in their own reformation and they enact this change through desistance work and their internal reasoning towards the resources they engage with. Their reasoning with these resources, i.e. the desistance work, is the key causal mechanism that causes them to desist from gang-related activity.

# 5 Discussion

DRI is a pervasive and pressing issue negatively impacting the health, well-being and social cohesion of communities throughout Ireland. This evidence review was conducted to respond to the expressed need for information on international best practice responses to DRI to inform community action by Local and Regional Drugs and Alcohol Task Forces. DRI occurs within the context of local drug gang networks, which in Irish communities have been described as having a loosely organized, three-tiered hierarchical structure resembling the specialty gangs described by Klein and Maxson (2006).[82] In the absence of a body of literature evaluating interventions to target DRI directly, we drew on gang control literature which describes approaches to target the underlying group processes and structures involved in perpetuating a cycle of community intimidation and violence. DRI is usually instigated by the drug gang hierarchy. Specifically, this evidence review sought to answer the following key questions with a view to informing a comprehensive community-based strategy: 1) What community-based interventions are effective in preventing entry into gang networks? 2) What community-based interventions are effective in promoting gang desistance among young people? and 3) What community and/or criminal justice approaches are effective in deterring or suppressing gang-related crime, intimidation and/or violence? To address a gap in the evidence responding to Question 2 on gang desistance, a complementary in-depth analysis of primary studies reporting on gang desistance was conducted to provide a better understanding of the desistance process and potential opportunities for intervention or support in this area. This section begins with a summary of findings in response to each of these questions before describing how effective strategies within each of these domains may be combined effectively in a comprehensive strategy. It then provides some general lessons learned for developing a comprehensive strategy and discusses the relevance of the findings to the local context.

## 5.1 What community-based interventions are effective in preventing entry into gang networks?

The goal of all approaches within the three levels of prevention is to reduce risk factors, enhance protective factors and prevent negative practices or negative outcomes. In the prevention section, we have broadened our reported outcomes to include antisocial behaviour, delinquency and crime, as these can be precursors of gang membership and are the likely outcomes of universal and selective prevention programmes. In addition, early universal and selective prevention programmes are key to developing the behaviours and skills to promoting positive outcomes in later life and avoid or reduce involvement in drugs, crime and gang membership. There is a considerable overlap between preventing crime and preventing drug use, both of which are relevant in terms of preventing DRI, as the former addresses potential perpetrators of DRI and the latter addresses potential victims. It is an area where education, health, social services and police can work proactively as part of a multi-strategy approach.

### 5.1.1 Universal prevention

Universal prevention programmes that are based on developing life skills (such as decision-making and problem-solving) can enhance protective factors and reduce risk factors, resulting in reduced antisocial behaviour and delinquency. The evidence on preventing gang membership specifically, although effective, is from one randomized controlled trial only. The key principles of the effective universal prevention programmes were: positive goals, parental involvement, group-based and interactive techniques, trained professional facilitators (in particular, teachers), manualized content (including intervention fidelity), and regular and frequent delivery of content.

### 5.1.2 Selected prevention

Parent skills-based selective prevention programmes for at-risk children aged 0–3 years show that there is good evidence to suggest that interventions which develop parenting skills, which support families, and which strengthen relationships between children and their parents/carers have immediate short-term impacts on child behaviour and parenting practices. Narrative analyses of the long-term delinquency outcomes concluded that, overall, family and parent training for at-risk parents reduced their children's level of delinquency in adolescence and crime in adulthood. Intervention fidelity and interactive or real-life examples were key principles of effective interventions. Overall, skills-based therapeutic interventions for school-aged children from at-risk populations had a small- to medium-sized effect in reducing child behavioural problems. This was true for both home visiting and parent training programmes. The principles of potentially effective targeted programmes were: positive goals, involvement of schools and parents, interactive and real-life examples, a manualized approach with high implementation fidelity, professional facilitators and regular contact.

One review found that self-control improvement programmes (selective prevention) were an effective intervention for improving self-control and reducing delinquency and problem behaviours up to the age of 10. Mentoring can have small beneficial effects on conduct and recidivism. However, mentoring programmes vary substantially and are predominantly based in the US. There is weak evidence to demonstrate that sports programmes may reduce youth crime and there is no available evidence to demonstrate the effect of education and employment opportunities on gang membership. Robust reviews and studies have shown that approaches to preventing youth crime and violence based on deterrence (prison visits) and/or discipline (boot camps) are ineffective and may be harmful.

### 5.1.3 Indicated prevention

There is a strong argument from review of clearinghouse interventions that the most effective and well-evidenced approaches to indicated prevention tend to have 'therapeutic' principles, meaning they aim to create positive changes in the lives of young people and/or their families, as well as prevent negative outcomes through group or individual therapeutic interventions. However, earlier systematic reviews do not support this finding. Of course, it is acknowledged that the therapeutic methods employed for high-risk youth are not effective for others, and methods such as the Gang Risk of Entry Factors tool are required in order to identify youth at high risk of gang joining for indicated prevention. There is some limited evidence from small studies in the US and Canada that gang prevention programmes reduced gang entry and facilitated gang exit.

### 5.1.4 What are the implications for gang prevention policy?

In light of the limited evidence on interventions to prevent gang membership specifically, there is an argument to consider effective programmes targeting delinquency, antisocial behaviour and crime more generally. Effective programmes targeting these outcomes tended to be school based or family focused, to incorporate skill training with opportunities for practising skills, or incorporate therapeutic principles for those at higher risk (indicated prevention) and be delivered by skilled facilitators acting in their professional capacity. Therapeutic programmes tended to show greater effect when appropriately targeted towards risk factors for gang membership, implicating the use of risk factor assessment tools, such as the Gang Risk of Entry Factors (GREF) assessment tool, for targeting interventions. As well as reducing risk factors and preventing negative outcomes, programmes focused on promoting positive changes in youth (and their families) may

be more acceptable to the community, due to the stigmatizing nature of programmes focused on specific issues such as gang membership, drugs, or crime.[40]

## 5.2 What community-based interventions are effective in promoting gang desistance among young people?

Desistance is an understudied phenomenon in the gang control literature. As Klein and Maxson (2006)[82] state, 'surprisingly little research has been conducted on gang desistance and the processes of leaving gangs' (p. 154). Pyrooz *et al*. (2014)[72] further comment 'at this point [in 2010], we do not know much more about gang desistance than when Klein (1971) first called attention to the issue' (p. 2). The findings of our review on community-based interventions to promote gang desistance concur with Pyrooz and Sweeten (2015),[89] who conclude that 'there are no known programmes with rigorous evaluations that have been found to facilitate desistance from gangs' (p. 5). Wong *et al.* (2012)[79] identified five interventions that were categorized as promoting gang alternatives; however, all of these had very limited evidence of a small or negligible impact on gang membership status or involvement in gang-related crime or violence.

To address this gap in the available evidence, we conducted an in-depth analysis of primary peer-reviewed studies providing descriptive data, either qualitative or quantitative, on the nature or process of gang desistance. This review sought to identify key principles of the desistance process using data on the lived experiences of former gang members to guide efforts to promote gang desistance among active gang members. Analysis of these data suggested that gang members performed *desistance work* to pursue prosocial values and seek alternative sites of belonging among prosocial groups. Prosocial values include reforming their masculinity, securing formal employment and performing fatherhood; prosocial groups include faith-based groups and local sporting clubs. We infer from the data that desistance from gang-related activity is underpinned by the building blocks of desistance work; this work and the work ethic it entails are key to understanding how former gang members become causal agents in reforming their identity and securing a sense of social belonging.

## 5.3 What community and/or criminal justice approaches are effective in deterring or suppressing gang-related crime, intimidation and/or violence?

Interventions identified in response to this question were classified as either gang activity prevention, which focuses on preventing the activities of gangs responsible for the most harm in the community by targeting the specific activities, the places or related behaviours, or gang activity suppression, which targets gang members and seeks to suppress or deter their harmful activities. Evidence regarding the effectiveness of gang activity prevention interventions is limited, in quantity and quality, and shows only modest, if any, impact on crime and violence. The most promising interventions in this category are carefully crafted civil gang injunctions and environmental design interventions, such as the implementation of street barriers in high crime areas and urban renewal efforts, with the latter having positive impacts on crime, while improving police legitimacy and communities' sense of control and cohesion. Within the gang activity suppression category, 'pulling levers' focused deterrence strategies are the most promising approach. Focused deterrence strategies involve: the selection of a crime problem, using data and intelligence to identify key offenders or offending groups; the mobilization of a diverse group of law enforcement, social services, and community stakeholders within a multi-agency task force; the framing of a response combining both strong enforcement using any legal means available and concrete offers of assistance; and direct, repeated communication with the individuals (usually by way of call-ins, notification meetings or forums) to change their behaviour (p. 14).[61] These 'pulling levers' focused deterrence strategies had the largest direct impact on crime and violence of all suppression strategies reviewed. There is moderate evidence that these strategies are associated with an overall statistically significant medium-sized effect on crime reduction. The evidence for other policing strategies was mixed, with hot spots, disorder

and problem-oriented policing approaches the most promising for achieving crime and violence reduction. Targeted drug law enforcement may contribute to increases in these outcomes, as they put additional pressure on the market and increase competition within the market.

### 5.3.1 What are the implications for suppression or deterrence policies?

A number of key lessons have been drawn out of included reviews relating to the use of deterrence or suppression approaches.[61, 79] First, targeting specific crimes rather than specific gangs may be more efficient given the dynamic and protective structures of gangs, and may also be more effective, as targeting specific gangs may unintentionally and counterproductively increase gang cohesion and solidarity. As in all areas of gang control, empirically validated approaches should be implemented over common-sense or politically favourable approaches;[79, 82, 117] based on the evidence reviewed here, this would suggest the implementation of a 'pulling levers' focused deterrence approach. Corsaro and Engel (2015)[67] draw out some useful lessons from the successful implementation of a focused deterrence strategy in a high-crime, disadvantaged urban area in the US, which could inform policy transfer to other settings. They credit the establishment of a multi-agency task force, persistent police and political commitment, and researcher-practitioner partnership with achieving high implementation fidelity. They credit the development of a programme manager and intelligence analyst and the ongoing use of detailed problem analyses with achieving an appropriately targeted intervention and sustained success. Lastly, they note the threat to continued collaboration posed by staffing changes, and argue that conscious effort is required by leadership in order to maintain motivation and engagement among all stakeholders, and to keep a clear focus on the identified problem to ensure sustainability.

## 5.4 What has been learned from existing comprehensive or holistic approaches?

Comprehensive gang control programmes – combining prevention, intervention and suppression – have shown promise, but have failed to reach their potential, achieving only mixed effects. Comprehensive approaches require clear specification of the component parts, the building of strong interagency partnerships with relevant agencies, effective communication and data sharing strategies, and a designated lead agency with strong leadership capacity and the ability to mobilize the community to ensure good implementation fidelity. Similarly, holistic gang control programmes are those that span the entire gang continuum, including prevention, intervention, suppression, and corrections-based rehabilitation.

Some authors are sceptical that comprehensive approaches – at least as conceptualized by Spergel *et al*. (2006)[118] – can be delivered effectively in most community contexts. Abt and Winship (2016)[61] contend that 'complete comprehensiveness, while laudable in theory, is unlikely to be achievable in practice. The best case for multidisciplinary collaboration recognizes that the capacity to coordinate is a finite resource to be used judiciously. The primary threat to the effectiveness of 'comprehensive' interventions is implementation failure caused by overloading coordination capacity' (p. 29). Likewise, Wong *et al.* (2012)[79] argue that 'while it is an admirable goal to tackle a problem on every front, all at once, it requires tremendous organization and the simultaneous commitment from numerous – sometimes very numerous – stakeholders. This is simply not realistic. Targeting the most pressing issue (i.e. gun violence) and focusing resources on a smaller problem might lead to increased effectiveness and might rally a community behind small victories in order to expand to greater victories' (p. 35). Others argue that purely suppression-focused approaches fail to address the supply of replacement gang members – those who step in to fill the place of any gang members removed through suppression efforts – that perpetuate the existence of the gang. Moreover, suppression efforts do little to substantively change the contexts that lead young people into gang life, or support those who are at high risk of future gang involvement to find a more prosocial path. Densley (2011)[117] argues

that 'deference to law and order, political, and American examples of practice is potentially very dangerous. Emphasis across the Atlantic (in the US) is not on gang intervention, but on gang suppression, which has alienated gang members even further from mainstream social institutions' (p. 21). He goes on to argue that policy analysts are justifiably critical of America's success in addressing the gang problem and have described how increasingly stringent suppression approaches were politically motivated as a tool to look 'tough on gang crime', which he describes as 'good politics, but bad policy'.

Despite this scepticism, it is generally accepted that comprehensive approaches, designed with consideration of organizational and leadership capacity, are the way forward in responding to gangs. Bilchik (1999)[119] argues that there is 'general recognition by gang experts that the most effective strategies are likely to be comprehensive, multi-pronged approaches that incorporate prevention, intervention and suppression activities' (p. xi). Much of the later literature supports this view, including Wyrick and Howell (2004),[120] who add that such an approach may not be possible in all areas. Where this is the case, they feel that programmes should involve strategic partners among diverse service providers, and draw together knowledge of youth gangs and local gang problems with risk factor identification and targeted activity (p. 10).[70] Densley *et al.* (2011)[117] argue that 'Gang suppression alone is a bankrupt agenda. True gang intervention requires a comprehensive model, which recognizes the gang phenomenon for what it really is: a complex interaction of individual and situational variables' (p. 20). Similarly, Abt and Winship (2016)[61] contend that 'absent a magic bullet, success may lie in the accumulation of individually modest, but collectively robust programmatic effects' (p. 27). While comprehensive approaches have yielded only promising findings, they are likely to be the most appropriate approach to tackling gangs in communities where they are pervasive and entrenched.

Importantly, the inclusion of a process evaluation alongside implementation of five iterations of the Spergel Comprehensive Community-wide gang prevention, intervention and suppression model have enabled lessons to be learned from the failed implementation of this model, which can guide the development of comprehensive strategies elsewhere. The Spergel Model comprises five components, including: community mobilization, opportunities provision, social intervention, suppression and organizational change and development.[118] No clear guidelines were given on how to implement each of these complex components, resulting in varied implementation and generally poor implementation fidelity. The Spergel Model required the cooperation of schools, police departments, employment agencies, grassroots organizations, community-based youth agencies, prosecution, probation agencies and others working in cooperation towards shared goals. Establishing effective interagency partnership across such a wide range of very diverse agencies is challenging and requires tremendous organizational and leadership capacity.

Lessons can also be gleaned from the review of 'comprehensive' interventions by Hodgkinson *et al*. (2015),[70] who identified key components of 'comprehensive' interventions evaluated in high-/medium-quality studies with demonstrated positive effects. These included: a case management or personalized, holistic approach; community involvement in the planning of interventions; community involvement in the delivery of interventions; expertise shared between agencies; and the delivery of incentives to change offending behaviour as part of a wider comprehensive intervention approach.

## 5.5 What are some of the general key lessons that have been learned in the literature?

### 5.5.1 The importance of community engagement

Across the literature reviewed, within the domains of prevention, intervention and suppression, a key message that emerged was the importance of involving the local community and the direct and continuing involvement of community leaders. The community has a role to play in problem identification, intervention design and its delivery. For example, O'Connor and Waddell (2015)[40] report that there is a strong, valid argument that community engagement, data sharing, and partnership building between young people, families, schools, communities, and public services can be important in identifying local risk and protective factors, identifying those with the greatest need, and supporting gang and violence prevention efforts. Community mobilization is

one of the five strategies included in the Spergel Model and is argued to be one of the most effective components of the model in chronic gang cities.[82] Within the context of the Spergel Model it is described as developing and maintaining an interacting set of public and private agencies, groups and residents to organize a comprehensive response to the gang problem. Community mobilization is also seen as an integral component of most focused deterrence approaches. These approaches draw together law enforcement, social support agencies, community organizations, and residents to identify the key problem of focus, identify the key offenders, develop the 'pulling levers' focused deterrence strategy and present a united front when communicating the clear deterrence message alongside offers of support at the notification sessions. Moreover, the desistance literature acknowledges the role of the community in acknowledging and supporting desistance work, or one's efforts to reform one's identity, lifestyle and values from gang member to prosocial member of the community.

For a number of reasons, community engagement may play an important role in any comprehensive gang control strategy. First, it provides local knowledge and insight to ensure that the gang control strategy is appropriate to the local context and the local gang problem. Second, the community can help ensure that the strategy is appropriately targeted by assisting with the identification of youth most at risk and the selection of the issues of greatest importance to the local community. Third, engaging and mobilizing the community presents a strong message to those involved in gang activity that crime, violence and intimidation will no longer be tolerated and that support is available for those ready to leave that life behind. Lastly, it can strengthen social cohesion by empowering the community, thus preventing feelings of helplessness and hopelessness that are perpetuated by DRI.

While a number of included reports emphasize the importance of engaging and mobilizing the local community in any effort to tackle gang-related crime or violence, studies of DRI and drug debt intimidation conducted in Ireland have suggested that community intimidation is so pervasive that it is limiting community engagement with local support agencies and community fora. A well-coordinated 'pulling levers' focused deterrence-type approach may be a possible means of re-establishing a sense of community safety and faith in law and order, to lay the foundation for expanded community participation.

### 5.5.2 The importance of interagency cooperation and partnership with good leadership and coordination

Any comprehensive response to gang problems requires partnership among a wide range of stakeholders from across social services, schools, law enforcement, probation and parole, the courts system, community agencies and leaders. Good coordination and communication between these stakeholders is essential to achieve maximum effectiveness. For example, a strong suppression approach without complementary support services to promote desistance or referral to drug treatments services leaves gang members with fewer options for positive change. A well-implemented gang control strategy requires a multi-agency effort and a strong leadership team who can oversee the coordination of the initiative and ensure collaboration.[38, 61, 64, 79] Moreover, strong leadership is required to effectively engage and mobilize the community.

### 5.5.3 The importance of implementation fidelity and a theoretical basis

Implementation fidelity refers to the extent to which a programme is delivered as intended by the intervention developers, and ensures that the observed effects following delivery can be attributed to the programme. Understanding and measuring the extent to which an intervention is implemented with fidelity to the protocol is key to understanding if an intervention works, how and why it works, in what context, and the extent to which outcomes can be improved. A number of authors of included reviews noted the importance of implementation fidelity.[40, 61, 79] As stated by Lipsey (2009)[73] in their meta-analytic overview of the characteristics of effective interventions, 'the quality with which the intervention is implemented has been as strongly related to recidivism effects as the type of programme, so much so that a well-implemented intervention of an inherently less efficacious type can outperform a more efficacious one that is poorly implemented' (p. 127). Likewise, Abt and Winship (2016)[61] argue that even the best interventions fail if they are not implemented effectively or lack sufficient resources.

Implementation fidelity is particularly important in the context of complex, multi-component behaviour change interventions and is essential to replicating outcomes of an intervention in a different setting. As Wong *et al*. (2012)[79] highlight in their review of 'comprehensive' interventions, in some sites the claimed implementation of the Spergel Comprehensive Community Model deviated from the 'model' to such an extent that it could no longer be considered a comprehensive approach. Practitioners are often faced with challenges in implementing evidence-based interventions in their local context with a different community, different organizational structures, and different capacity or resources than the prototype. Some degree of tailoring of the intervention may be required to provide an intervention in a particular community context. In these instances, practitioners must strike a balance between tailoring programmes and maintaining fidelity to the evidence-based components of the specified intervention. Enrolling the support of someone with research expertise to assist in making these decisions could help ensure that the active ingredients are maintained. Moreover, any change from the original specification should be documented and, ideally, its impact evaluated.

### 5.5.4 The importance of data, research and monitoring

Implementation fidelity is critical to expanding the evidence base in the gang control area, can be promoted through process evaluation, and enhances the robustness of outcome evaluation. A number of authors have commented on the 'weak and fractured state of gang-related research, despite decades of effort'.[47, 49, 61, 70, 83] Previous reviews have failed to identify a sufficient body of robust literature to draw firm conclusions and inform policy decisions. A number of authors have suggested that drawing lessons from more generalized strategies targeting delinquency, crime and violence to inform gang reduction approaches may be more promising, given the limitations of the gang-related literature.[61, 83] In a critical appraisal of London's response to gangs, Densley (2011)[117] calls for 'evaluation of interventions according to robust scientific methodologies. At the very least, there should be evidence that the intervention was implemented as intended (implementation fidelity). Preferably, there should be evidence of whether or not there was a positive or deterrent effect, whether the intervention can be externally replicated, whether there is a consistent pattern of statistically significant effects, and, ideally, whether these effects are sustained beyond treatment for at least a year with no negative or harmful ramifications' (p. 20). Going forward, interventions in this area should be robustly evaluated for effectiveness and cost-effectiveness to help advance intervention development efforts and resource allocation decisions. Effective intervention evaluation requires a conceptually clear theory of change so that active ingredients can be identified. In addition, the evaluation of an intervention should be planned during the design and implementation phase.

Many of the authors included in the review argued for the use of data-driven approaches. Data can be used to identify local risk and protective factors, to identify and target the most appropriate people, to assess the implementation of initiatives, and to assess their effects. For example, some of the more successful initiatives under review by Campie *et al*. (2013)[64] conducted foundational research to understand the local problem before targeting resources. For others, the data analysis and information generation continued throughout the programme, usually facilitated by researcher-practitioner partnerships.[64] Many of the focused deterrence approaches used a data-driven approach. For example, as part of the problem identification phase of the Group Violence Reduction Strategy in New Orleans, law enforcement officials and researchers conducted a series of homicide incident reviews and gang audits to create actionable intelligence organized by: a) individual gang members; b) geographical problem areas; c) social networks; and d) participation in violence.[67] These data were then used to design and target the strategy. Likewise, the Chicago Group Violence Reduction Strategy adopted a similar approach using all available data to identify specific individuals and groups who were actively involved in gang-related violence.[39]

A number of authors encourage researcher-practitioner partnerships as a means of enabling a data-driven approach, research and monitoring.[64, 67] For example, Corsaro and Engel (2015)[71] argue that 'researcher-practitioner partnerships are imperative not only for problem identification, implementing effective strategic approaches, resource management and evaluation purposes, but also for helping law enforcement keep track as to which individuals and groups are driving a city's violence and crime problems, and for maintaining programmatic sustainability. Each of these tasks is important for successful policy transfer and

programme implementation' (p. 498). A recent Irish study has used such a data-driven approach with a partnership between researchers and Gardaí to identify the structure and function of criminal networks in drawing young people into criminal activity.[14] Specifically, Garda analysts used PULSE incident report data to construct a network map of the relationships between co-offenders in selected acquisitive crimes and drugs for sale or supply. The researcher then interviewed Gardaí about members in the network, using the map as a reference tool and a novel approach to protecting the confidentiality of offenders to gain further insight into the functioning of the network.[14] This study demonstrates that a data-driven approach is possible within the Irish context and provides a model for future engagement.

## 5.6 What are the implications for developing an effective comprehensive strategy?

To develop a feasible comprehensive gang control programme, Linden (2010)[121] argues that programme developers should consider the evidence for what has worked and what has not worked elsewhere and then adapt programmes to the local context, both with regard to the local gang context and to the resources and organizational structures in place in the targeted communities. To build an effective comprehensive intervention, effective prevention, intervention and suppression approaches must first be identified.[79] While the current state of gang control literature precludes firm conclusions about the effectiveness of interventions within each domain, those approaches which have been shown to be promising or effective should be considered for implementation and concurrent evaluation. However, developing a comprehensive gang control strategy is not simply a matter of selecting the most effective programme from each of the prevention, intervention and suppression categories; there are many other considerations.

First, a clear understanding of the local gang problem is required. A good understanding of the local context and context-specific challenges using local knowledge and intelligence is required in order to adequately respond; one-size-fits-all approaches are not appropriate.[51, 79] Klein and Maxson (2006)[82] argue: 'To target gang members or gangs without attention to the local sources of their emergence and maintenance must yield time-limited effects even in successful programmes' (p. 250). They continue by highlighting the role of carefully collected data prior to, during, and following programme implementation, and urge that priority be given to ensuring a data-driven approach.[82]

Second, a clear understanding of the resources available to address the gang problem is required in order to design a response that can be feasibly delivered at a consistent high quality and sustained over time. This resource assessment includes both financial resources and organizational capacity. There are numerous examples in the literature where scaling-up of intervention delivery resulted in watered-down interventions, due to trying to do too much with too little. Moreover, having a clear articulation of realistic short- and medium-term goals and objectives can support funding sustainability and build momentum for expanded activity. As Wong *et al.* (2012)[79] highlight, 'targeting crime and gang membership... might require considerable lag time to yield results. Confidence in the programme might fade and funding might be terminated if short-term outcomes are not perceived. Thus, building on small victories to further expand interventions might ensure public support and therefore financial support' (p. 35).

The failed implementation of previous comprehensive models was partly attributed to a failure to match the intervention complexity to the leadership and coordination capacity available and partly attributed to the failure to successfully establish a multi-agency collaborative task force. In selecting a feasible approach, task forces should consider the local organizational capacity to deliver a comprehensive approach, including the capacity to coordinate activities and communicate across agencies and match the scale and complexity of the approach to the identified capacity.

Given the current state of evidence in the area, any intervention that is implemented should include a process and outcome evaluation within a pilot project area before widespread implementation, in order to ensure that it has the intended effect, does not cause unintended harms, and is cost-effective. Given the emphasis on the utility of researcher-practitioner partnerships in ensuring implementation fidelity and promoting robust process and outcome evaluation in the literature,[64, 67, 79] consideration should be given to involving a representative from academia or someone with considerable research expertise in task force

discussions who can advise in these key areas. The Research Evidence into Policy, Programmes and Practice (REPPP), recently established in the University of Limerick with the aim of improving the evidence base in relation to youth crime policy-making in Ireland, or the Centre for Effective Services, may be well placed in this regard.

Currently, there are a number of local responses to DRI being implemented in Local and Regional Drugs and Alcohol Task Force areas; however, there is little coordination of these approaches across task force areas and very few of these initiatives have been formally evaluated. Given the dearth of evidence of effective interventions specifically responding to DRI or DDI, evaluation of any initiatives targeting this phenomenon would enable learning from the successes and failures of these initiatives, and have potential to inform the development of effective responses across task force areas.

## 5.7 Strengths and limitations

While every effort was taken to be as comprehensive as possible, given the breadth of this review, the time constraints and the available literature, we may have missed important resources that were not detected in our search. Moreover, these constraints precluded consideration of the cost-effectiveness of approaches or their feasibility within the context of the task force areas and available resources. However, given the current state of the literature, it is unlikely that robust cost-effectiveness data currently exist within this area. The effects of changes in macro-level community factors, which represent the social determinants of gang and crime involvement, were outside the scope of this review; however, school improvement, job creation, targeted efforts to reduce inequalities and general community regeneration and investment may be important for changing the context, which perpetuates a cycle of drug-related crime, violence and intimidation within Irish communities. Given that the audience for this review was the Local and Regional Drugs Task Forces, and given the limited resources of the review team, we did not consider prison-based interventions. This may be an important exclusion, as prisons may facilitate or even exacerbate gang activity. For example, Densley (2011)[117] argues that, largely as a result of the predominance of suppression approaches, 'prison in effect has become a space for the expanded business and territorial organization of London's gangs' (p. 19) and suggests that incarceration can strengthen the organizational structure of gangs, facilitate recruitment and create more cohesive units.

This review presented a number of methodological challenges. The concept of DRI or DDI as presented in the Irish grey literature, published reports, task force and community organization reports and media websites was rarely explicitly mentioned in any international literature, reports or websites. That is not to say that the international literature does not address these concepts or their related behaviours; rather, that these concepts are described using different language or terminology, and they appear to be addressed indirectly in research that more directly addresses drug-related crime and violence, gang-related crime and violence, and community violence. In the absence of a body of literature evaluating interventions to target DRI specifically, we drew on a related body of evidence on international best practice responses to gangs and gang crime. However, there may be some limitations associated with this approach. First, this approach assumes that reducing gang activity by targeting the structure and functioning of gangs will reduce indirectly the fear and intimidation that gangs create in their communities. Second, this approach assumes transferability of approaches between 'street gangs' and the subgroup of 'specialty gangs' involved in the distribution of drugs in local communities. Third, this approach assumes that interventions designed and evaluated within the different social, cultural and political context of the US could inform approaches in Ireland. This latter point is echoed by Densley (2013)[117] in his analysis of the UK's response to gangs. He states: 'Many of the examples of gang control practice have only ever been applied in the unique social and policy context of the US, which differs in terms of historical, racial, social context and also importantly access to firearms' (p. 14). There is currently insufficient evidence to determine the validity of these assumptions or comment on the impact of these assumptions on the relevance of the literature to the Irish situation.

The third assumption is particularly important given the prominent role of family and kinship in structuring many Irish criminal gangs. The role of family and kinship in gang activity in Ireland is quite distinct from its role in the US and UK youth gangs, where policy analysts have repeatedly portrayed gangs as replacement families for

marginalized youth alienated from their families of origin. Hourigan (2016)[32] argues 'The importance of family relationships in embedding, rather than challenging, gang participation raises significant questions about the juvenile justice intervention strategies developed... A number of these strategies rely heavily on parental intervention in tackling gang participation. However, if children involved in gangs are strongly embedded in families which support their gang participation because other family members are also involved in the gang, it is unlikely that these interventions will be successful' (p. 153).

For those young people who have family ties to the gang, the presence of these ties may have implications for the effectiveness of prevention programmes which target parental behaviours or require parental support. Likewise, the process of desistance, and particularly the role of obligations to the family in this process, may differ for individuals attempting to leave the gang where the family is inextricably linked with the gang. However, while kinship ties may play an important role in gang structures, family ties are only one route to becoming involved in drug gang networks. The three Irish studies used to develop the conceptual framework for this review also described processes of grooming vulnerable young people into gang-related crime and violence and requiring indebted drug users to commit gang-related crimes, violence or intimidation to repay drug debts.

Another methodological challenge was posed by the heterogeneity of the literature reporting on gang interventions. The evidence to address the review questions was 'hard-to-detect' – it was found across a range of disciplines and varying terminology was used to define key concepts.[122] To address this challenge, we conducted extensive scoping searches to clarify and expand the range of terminology used to develop a search strategy. Moreover, where gang control strategies have been implemented, they have seldom been evaluated and where they have been evaluated, evaluations lack rigour. This has been noted in an overview by the National Crime Prevention Centre,[36] which states: 'Several eminent gang researchers (i.e. Klein and Maxson, 2006;[82]; Esbensen, 2004;[123] Reed and Decker 2002[124]) have observed that gang projects, programmes and strategies have been, and continue to be, rarely evaluated. Moreover, many of those that have been evaluated have not been evaluated well'.[36] This meant that there was a mix of peer review and grey literature, which required different approaches to searching and screening.

We included in our search strategy searches of relevant organizational websites, screening of reference lists of included studies, and other opportunistic searches to try to account for the broad range of literature. This heterogeneity in the quantity, quality and methodological design of included studies precluded more robust or quantitative synthesis.

There is a relative paucity of research that has examined gender differences, particularly in relation to the gang desistance process, and much of the desistance literature reviewed disproportionately relates to males. This emphasis on male desistance is especially evident in the discussion of the role of masculinity in identity reform.

Strengths of this report include its adherence to methodological principles of systematic review so far as feasible, coupled with the in-depth examination of the desistance process, which addresses an identified gap in the desistance literature and makes a valuable contribution to the understanding of this process using a robust and critical approach.

Future research on drug-related intimidation in Ireland should consider synthesizing a bridge between the policy literature on gang prevention and desistance and larger ethnographic studies focusing on intimidation, which could provide greater insight into the complexity of the issue in the Irish context. Furthermore, future work should consider exploring studies in the area of criminology and organized crime, including that published in books and from the UK, US and Global South contexts (including the Mediterranean) that examine how tight kinship networks can contribute to intimidator behaviours often linked to protection rackets, which may provide greater insight into responses to drug-related intimidation in Ireland.

## 5.8 Conclusions

As Wyrick and Howell (2004)[120] astutely articulate, 'there are no quick fixes or easy solutions for the problems youth gangs create or the problems that create youth gangs' (p. 21). This evidence review provides an overview of the gang control literature, examining in turn community-based approaches to preventing gang entry, supporting gang desistance and suppressing or deterring gang-related crime, violence and intimidation. This review sought to inform the development of strategies to address the rampant intimidation associated with drug distribution within Local and Regional Drugs and Alcohol Task Force areas. The review argues that reducing drug gang activity by implementing a comprehensive gang control strategy that seeks to prevent young people from joining gangs, promote desistance among active gang members and suppress the activity of persistent gang members, would indirectly reduce the fear, intimidation, crime and violence created by drug gang networks in the communities where they are entrenched. This evidence review systematically summarizes international gang control literature and addresses an identified gap in the evidence, providing unique insight through a theoretical reinterpretation of the gang desistance research. Lessons are drawn from reviews of comprehensive approaches, and implications for the Irish context are presented.

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# Appendices

# Appendix 1: Community-based interventions to prevent entry-level drug use among young people

Illicit drug use in young people is a global problem, with potential short-term and long-term impacts on physical, mental, and social well-being.[125] The UN General Assembly Special Session on Drugs (UNGASS), European Union (EU) and the Department of Health in Ireland promote evidence-based policies to deal with illicit drug use. In its submission to UNGASS 2016, the EU stated that there is a 'need for an integrated, balanced and evidence-based policy and a sound public health approach' to deal with illicit drug use. With respect to prevention, 'the EU considers that prevention in all its forms and based on thorough need assessments constitutes an integral pillar of any effective drugs strategy'. Illicit drug use is associated with delinquency, crime, gang membership and DRI.

## Profile[126]

Adolescence is the peak time for initiation of substance use, with tobacco and alcohol usually preceding the use of illicit drugs. Where longitudinal data were available, the median age for starting to use cannabis is 18 to 19 years and for cocaine it is 21 to 24 years. The peak age for substance use is 20 to 24 years.

## At-risk[126, 127] populations and risk[126]

The risk factors for illicit drug use are:

1. Contextual factors such as positive norms about illicit drug use and ease of drug availability
2. Fixed markers of risk which are classified into three groups:
   I. Structural, such as low socioeconomic status, marginalized populations
   II. Familial, such as family history of substance use, parental conflict or separation or parental psychopathology
   III. Individual, such as male, earning as an adolescent; pre- or post-natal exposure to alcohol or other drugs
3. Individual and interpersonal factors such as neglect, abuse, poor family relationships, poor parental supervision, peer use, opposition behaviour, conduct disorder, low educational attainment and adolescent employment.

Many risk factors co-occur.

The population of young people at risk of illicit drug use are those:[126, 127]

- With mental health problems
- Whose parents use drugs (NICE)[127]
- In state or foster care (NICE)[127]
- Classified as members of marginalized indigenous groups
- Who are homeless
- Involved in commercial sex work (NICE)[127]
- Who are as lesbian, gay, bisexual or transgender
- Who are offenders.

## Definition of drug prevention[128]

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) states that prevention is 'evidence-based socialisation where the primary focus is individual decision-making with respect to socially appropriate behaviours'. Its aim is not solely to prevent substance use, but also to delay initiation, reduce its intensification or prevent escalation into problem use. Socialization is a process of transferring culturally acceptable attitudes, norms, beliefs and behaviours, and of responding to such cues in an appropriate manner with adequate impulse control. The Centre goes on to note that the challenge of drug prevention lies in helping young people to adjust their behaviour, capacities, and well-being in fields of multiple influences such as social norms, interaction with peers, living conditions and their own personality traits.

## Drug prevention strategies and their effect

Mrazek and Haggerty (1994)[129] classified prevention strategies into three groups (universal, selective and indicative) based on the overall vulnerability of the people addressed, and an overview of the classification is presented in the following bullet points.[128] Examples of types of prevention programmes are presented below each description:

1. Universal prevention which addresses a population at large and targets the development of skills and values, norm perception, interaction with peers and social life
   a. Mass media campaigns which inform about the risks and dangers of drugs are ineffective as a single strategy.[128, 130]
   b. School-based prevention programmes include school curriculum and skills-based programmes, school-wide climate change programmes, parent and family training programmes and classroom management programmes. The more effective of these interventions focuses on social skills (empathy, communication) and personal skills (decision-making, coping)[40, 128] and ineffective intervention focuses on information about drugs.[45, 130] Programmes combining interventions based on social influence and on skills-based interventions (while including parents) have been proven to be effective in reducing licit and illicit drug use somewhat.[128]
   c. Programmes for parents that have shown effects provide intensive training sessions with parent and child; these sessions clarify expectations, outline appropriate discipline and provide skills to manage strong emotions and skills for effective communication.[40, 128] Ineffective parental programmes focus on information about drugs.[128] These parenting programmes can occur in the community or school.
      i. School or community programmes will have poorer outcomes if delivered by computer or by staff who provide minimal input.

2. Selective (targeted) prevention which addresses vulnerable groups where substance use or delinquent behaviour is often concentrated and focuses on improving their opportunities in difficult living and social conditions.
   a. Parent and family training programmes and home visits have been shown to be effective in improving conduct or behaviour and in reducing arrests and convictions in later life.[40, 128, 130]
   b. School curriculum and skills-based programmes for children who come from at-risk communities. Interventions aimed at disadvantaged students[40, 128] and peer-led interventions have shown promising results.[128]
      i. School and family programmes may have poorer outcomes if the facilitator does not implement the programme in accordance with the programme specification (intervention fidelity).[40]
   c. Counselling and information approaches in nightlife settings (no evidence).[128]
   d. Alternative leisure time interventions for vulnerable young people (no evidence).[128]
   e. Mentoring to reduce alcohol or drug use (no consistent evidence that it reduces initiation or use).[128]

3. Indicated (targeted) prevention which addresses vulnerable (high-risk) individuals and helps them in coping with their individual personality traits that make them more vulnerable for escalating drug use or involvement in delinquent behaviour.

a. Comprehensive community-based programmes are more effective in reducing licit and illicit drug use among high-risk young individuals than interventions targeting community or school alone.[128]
b. Multicomponent and interactive programmes are effective in reducing licit drug use.[128]
c. Multidimensional family therapy, including foster family therapy, involves skills training for parents and/or guardians, children and whole families.[40, 128 130] Comprehensive family-oriented prevention programmes proved effective in reducing (licit and illicit) substance use.[128] This can take place in the home or in a community clinic. Some examples identified by NICE include:[127]
   i. Orte *et al*. (2008),[131] in a before and after study, implementing a family-based intervention (involving skills training for parents, one of whom had a drug addiction, and children aged 6–14 years) reported significant improvements in impulsive behaviour, ability to make new friends and problem-solving skills. The study was judged to be of moderate quality.
   ii. There was moderate evidence from two RCTs[132, 133] that drug use was lower in the group of adolescent offenders (12–17 years) who received a skills training family-based intervention than in the control group. However, there was moderate evidence from another study[134] that drug use was not changed among young offenders who had a similar intervention.
   iii. Kim and Leve (2011)[135] in a randomized controlled trial (RCT) found that skills training for foster parents combined with skills training and information for children (girls aged 10–12) was associated with prosocial behaviour after 12 months and reduced cannabis use at 36 months.
   iv. Two low-quality RCTs[136, 137] reported that the evidence for the effectiveness of behaviour management systems combined with skills training for foster parents looking after foster children was mixed. Some of these children were in contact with young offender teams.
   v. One low-quality RCT reported that same-sex youth who participated in an online skills-building intervention used fewer illicit drugs (excluding cannabis) three months after the intervention compared to a control group (unknown intervention). The same group had better drug refusal and problem-solving skills at three months.
d. College or university skill-based and cognitive behavioural therapy for third-level students (insufficient evidence)[128]
e. Screening and motivational interviewing or brief interventions for young people with heavy alcohol or drug use in primary care (insufficient evidence for drugs and mixed findings for alcohol) or emergency departments (insufficient evidence)
   i. Cognitive behavioural intervention and psychoeducational intervention in one small primary study were equally effective in reducing cannabis use for young people with psychosis.[127]
   ii. Motivational interventions and skills training had little effect on the drug use of homeless people.[127]

The three prevention types presented above use persuasion to change the behaviour of individuals. Complementing these approaches, but without persuading each individual, prevention can effectively change human behaviour by modifying its social, physical and economic context through:

4. Environmental prevention which addresses societies or social environments and targets social norms, including market regulations[128, 130]
   a. Regulation of the tobacco or alcohol industries using mechanisms to increase price (strong benefit), restrict availability (mixed evidence) and decrease advertising (insufficient evidence)[128, 130]
   b. Scheduling drugs under international conventions (mixed findings)[128, 130]
   c. Police and law enforcement (mixed findings)[128, 130]

## Conclusion

There is a growing evidence base, albeit from a very low base, for what works and what does not in the field of drug prevention. In general, more effective interventions seem to be those that target the social and emotional determinants of substance use and risk behaviour, such as impulsiveness or disinhibition, conformity to perceived norms or problems with adapting to school and family life. Up until now, appealing to young people's rationality by informing them about the risks and effects of drug use has not proved successful.[128]

On the evidence base for prevention, the EU concludes that 'there is a need to improve the availability and effectiveness of evaluated and evidence-based prevention measures to achieve a reduction in demand among the general public and in various settings and target groups'.[128]

# Appendix 2: Search results

All the searches were conducted between 16 and 23 August 2016

## Search table for Question 1: What community-based interventions are effective in preventing entry into gang networks among at-risk children?

| Database | Search string | Results exported to EndNote |
|---|---|---|
| **Cochrane Database of Systematic Reviews** (Wiley platform) | LF browsed all published reviews in the Cochrane Developmental, Psychosocial and Learning Problems Group (n=143) and the Public Health Group (n=15) | 2 |
| **Campbell Database of Systematic Reviews** (Wiley platform) | LF browsed all published reviews in the Campbell Database of Systematic Reviews Criminal Justice and Social Welfare projects (n=96) | 4 |
| **Database of Abstracts of Reviews of Effects (DARE)** (Wiley platform) | 1. MeSH DESCRIPTOR Primary Prevention IN DARE<br>2. MeSH DESCRIPTOR Secondary Prevention IN DARE<br>3. (prevent*):TI<br>4. ((gang or gangs or gangster or gangland))<br>5. MeSH DESCRIPTOR [Juvenile Delinquency] EXPLODE ALL TRE<br>6. (delinquen* or devian* or antisocial)<br>7. #1 OR #2 OR #3<br>8. #4 OR #5 OR #6<br>9. #7 AND #8 | 12 |
| **EPPI-Centre Systematic Reviews** | LF browsed all published reviews listed on the EPPI-Centre website (n=192) | 1 |
| **Joanna Briggs Database of Systematic Reviews and Implementation Reports** | Searched for the terms gang or crime across all fields | 0 |

| Database | Search string | Results exported to EndNote |
|---|---|---|
| **MEDLINE (Ovid)**<br>Epub Ahead of Print, In-Process and Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to present<br>(Ovid platform) | 1. Meta-Analysis as Topic/<br>2. meta analy$.tw.<br>3. metaanaly$.tw.<br>4. Meta-Analysis/<br>5. (systematic adj (review$1 or overview$1)).tw.<br>6. exp Review Literature as Topic/<br>7. or/1-6<br>8. cochrane.ab.<br>9. embase.ab.<br>10. (psychlit or psyclit).ab.<br>11. (psychinfo or psycinfo).ab.<br>12. (cinahl or cinhal).ab.<br>13. science citation index.ab.<br>14. bids.ab.<br>15. cancerlit.ab.<br>16. 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15<br>17. reference list$.ab.<br>18. bibliograph$.ab.<br>19. hand-search$.ab.<br>20. relevant journals.ab.<br>21. manual search$.ab.<br>22. 17 or 18 or 19 or 20 or 21<br>23. selection criteria.ab.<br>24. data extraction.ab.<br>25. 23 or 24<br>26. Review/<br>27. 25 and 26<br>28. Comment/<br>29. Letter/<br>30. Editorial/<br>31. animal/<br>32. human/<br>33. 31 not (31 and 32)<br>34. or/28-30,33<br>35. 7 or 16 or 22 or 27<br>36. 35 not 34<br>37. exp Tertiary Prevention/ or exp Secondary Prevention/ or exp Primary Prevention/<br>38. (prevent* or interven*).mp<br>39. (gang or gangs or gangster or gangland).mp<br>40. (communit* or neighbo* or local* or project* or program*).mp<br>41. 37 or 38<br>42. 39 and 40 and 41<br>43. 36 and 42 | 3 |
| **PROSPERO**<br>(International prospective register of systematic reviews) | Searched for the terms: gang(s) or gangster or gangland | 1 |

| Database | Search string | Results exported to EndNote |
|---|---|---|
| **PsycINFO** 1806 to July Week 4 2016<br>(Ovid platform) | 1. exp Meta Analysis/<br>2. meta analy$.tw.<br>3. metaanaly$.tw.<br>4. (systematic adj (review$1 or overview$1)).tw.<br>5. exp 'Literature Review'/<br>6. 1 or 2 or 3 or 4 or 5<br>7. cochrane.ab.<br>8. embase.ab.<br>9. (psychlit or psyclit).ab.<br>10. (cinahl or cinhal).ab.<br>11. science citation index.ab.<br>12. bids.ab.<br>13. cancerlit.ab.<br>14. reference list$.ab.<br>15. bibliograph$.ab.<br>16. hand-search$.ab.<br>17. relevant journals.ab.<br>18. manual search$.ab.<br>19. 14 or 15 or 16 or 17 or 18<br>20. selection criteria.ab.<br>21. data extraction.ab.<br>22. 20 or 21<br>23. Review/<br>24. 22 and 23<br>25. Letter/<br>26. 6 or 19 or 22 or 24<br>27. 26 not 25<br>28. (gang or gangs or gangster or gangland).tw.<br>29. 27 and 28<br>30. limit 29 to English language | 36 |
| **Psychology and Behavioral Sciences Collection**<br>(EBSCO platform) | S1 DE 'GANG prevention' OR DE 'GANG members' OR DE 'GANGSTERS'<br>S2 gangs or gang or gangster or gangland [All Fields]<br>S3 TI prevent* or interven* [All Fields]<br>S4 AB prevent* or interven*<br>S5 DE 'PREVENTION'<br>S6 S1 OR S2<br>S7 S3 OR S4 OR S5<br>S8 systematic review [All Fields]<br>S9 meta analysis [All Fields]<br>S10 metaanalysis [All Fields]<br>S11 umbrella review [All Fields]<br>S12 TI review<br>S13 S8 OR S9 OR S10 OR S11 OR S12<br>S14 S6 AND S7 AND S13 | 2 |

| Database | Search string | Results exported to EndNote |
|---|---|---|
| **SocINDEX with Full Text** (EBSCO platform) | S1 systematic review [All Fields]<br>S2 meta analysis [All Fields]<br>S3 metaanalysis [All Fields]<br>S4 gang or gangs or gangster or gangland [All Fields]<br>S5 (DE 'GANGSTERS') OR (DE 'YOUTH gangs') OR (DE 'GANG prevention') OR (DE 'GANGS')<br>S6 S4 OR S5<br>S7 TI review<br>S8 S1 OR S2 OR S3 OR S7<br>S9 S6 AND S8<br>S10 DE 'GANG prevention'<br>S11 TI prevent* or interven*<br>S12 AB prevent* or interven*<br>S13 S10 OR S11 OR S12<br>S14 S6 AND S8 AND S13 | 24 |
| **Social Policy and Practice** (Ovid platform) | 1. gang*.mp.<br>2. (prevent* or interven*).mp.<br>3. systematic review.mp.<br>4. meta analysis.mp.<br>5. metaanaly$.tw.<br>6. 3 or 4 or 5<br>7. 1 and 2 and 6 | 3 |
| | **TOTAL RECORDS RETREIVED** | **88** |

## Search table for Question 3: What community-based interventions are effective in promoting gang desistance among young people?

| Database | Search string | Results exported to EndNote |
|---|---|---|
| **Cochrane Database of Systematic Reviews** (Wiley platform) | Searched: 'gang or gangs or gangster or gangland in Title, Abstract, Keywords in Cochrane Reviews' | 2 |
| **Campbell Database of Systematic Reviews** Advanced Search page | Searched Gang* across title | 4 |
| **Database of Abstracts of Reviews of Effects (DARE)** (Wiley platform) | Searched (gang or gangs or gangster or gangland):TI IN DARE | 2 |
| **EPPI-Centre Systematic Reviews** | Searched page of chronological publications. Searched for 'Gang' | 1 |
| **Joanna Briggs Database of Systematic Reviews and Implementation Reports** | Searched Gang across ALL fields – no results | 0 |

| Database | Search string | Results exported to EndNote |
|---|---|---|
| **MEDLINE (Ovid)**<br>Epub Ahead of Print, In-Process and Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to present (Ovid platform) | 1. gang*.mp.<br>2. (desist* or leave or exit* or disengag*).mp.<br>3. 1 AND 2<br>4. (gangli* or gangr*).mp.<br>5. 3 NOT 4 | 27 |
| **PROSPERO**<br>(International prospective register of systematic reviews) | Searched: gangs or gang or gangster or gangland | 27 |
| **PsycINFO** 1806 to July Week 4 2016<br>(Ovid platform) | 1. exp JUVENILE GANGS/ or exp GANGS/<br>2. gang*.mp.<br>3. 1 OR 2<br>4. (desist* or leave or exit* or disengag*).mp.<br>5. 3 AND 4<br>6. gangli*.mp.<br>7. 5 NOT 6 | 117 |
| **Psychology and Behavioral Sciences Collection**<br>(EBSCO) | (DE 'GANGS' OR gang*) AND (desist* OR leave OR exit* OR disengag*) | 30 |
| **SocINDEX with Full Text**<br>(EBSCO platform) | (DE 'GANGS' OR gang*) AND (desist* OR leave OR exit* OR disengag*) | 72 |
| **Social Policy and Practice**<br>(Ovid platform) | 1. gang*.mp.<br>2. (desist* or leave or exit* or disengag*).mp.<br>3. 1 AND 2 | 50 |
| | **TOTAL RECORDS RETRIEVED** | **332** |

## Search table for Question 4: What community and/or criminal justice approaches are effective in deterring or suppressing gang-related crime, intimidation and/or violence?

| Database | Search string | Results exported to EndNote |
|---|---|---|
| **Cochrane Database of Systematic Reviews**<br>(Wiley platform) | LF browsed all published reviews and protocols in the Cochrane Developmental, Psychosocial and Learning Problems Group (n=201) and the Public Health Group (n=52). References to reviews that were potentially relevant to our research question were downloaded for screening. | 3 |

| Database | Search string | Results exported to EndNote |
|---|---|---|
| **Campbell Database of Systematic Reviews** Advanced Search page | LF browsed all published reviews in the Campbell Database of Systematic Reviews Criminal Justice and Social Welfare projects (n=96). References to reviews that were potentially relevant to our research question were downloaded for screening. | 4 |
| **Database of Abstracts of Reviews of Effects (DARE):** (1994 and January 2015) Wiley | 1. MeSH DESCRIPTOR Violence IN DARE<br>2. MeSH DESCRIPTOR Crime IN DARE<br>3. (crime* or violen* or intimidate* or threat* or vandal* or menace* or offen* or arrest* or victim*):TI IN DARE<br>4. (gang or gangs or gangster or gangland):TI IN DARE<br>5. (Suppress* or deter* or reduc* or (Community adj polic*) or curfew* or anti-gang or policing or (gang adj injunction*) or recidivism or combat*):TI IN DARE<br>6. #1 OR #2 OR #3<br>7. #4 AND #5 AND #6 | 0 |
| **EPPI-Centre Systematic Reviews** | LF browsed all published reviews listed on EPPI Centre website (n=192. References to reviews that were potentially relevant to our research question were downloaded for screening. | 1 |
| **Joanna Briggs Database of Systematic Reviews** | Searched for the terms gang or crime across all fields | 0 |
| **MEDLINE (Ovid)** Epub Ahead of Print, In-Process and Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to present | 1. (gang or gangs or gangster or gangland).tw.<br>2. (Suppress* or deter* or reduc* or (Community adj polic*) or curfew* or anti-gang or policing or (gang adj injunction*) or recidivism or combat*).tw.<br>3. exp Violence/<br>4. exp Crime/<br>5. (crime* or violen* or intimidate* or threat* or vandal* or menace* or offen* or arrest* or victim*).tw.<br>6. 3 or 4 or 5 | 146 |
| **PROSPERO** (International prospective register of systematic reviews) | Searched: gangs or gang or gangster or gangland<br>LF screened the results (n=27) for relevance | 1 |
| **PsycINFO** 1806 to July Week 4 2016 (Ovid platform) | 1. (gang or gangs or gangster or gangland).tw.<br>2. exp JUVENILE GANGS/ or exp GANGS/<br>3. 1 or 2<br>4. (Suppress* or deter* or reduc* or (Community adj polic*) or curfew* or anti-gang or policing or (gang adj injunction*) or recidivism or combat*).tw.<br>5. 3 and 4<br>6. (crim* or violen* or intimidate* or threat* or vandal* or menace* or offen* or arrest* or victim*).tw.<br>7. 5 and 6<br>8. limit 7 to English language | 483 |

| Database | Search string | Results exported to EndNote |
|---|---|---|
| **Psychology and Behavioral Sciences Collection**<br>(EBSCO platform) | S1 (AB gang* NOT (gangr* OR gangl*)) OR (TI gang* NOT (gangr* OR gangl*))<br>S2 DE 'GANG members' OR DE 'GANG prevention' OR DE 'GANGS'<br>S3 DE 'PUNISHMENT in crime deterrence'<br>S4 Suppress* OR deterrence OR reduc* OR (Community ADJ polic*) OR curfew* OR truan* OR anti-gang or policing OR (gang ADJ injunction*) OR recidivism OR combat*<br>S5 S1 OR S2<br>S6 S3 OR S4<br>S7 S5 AND S6 | 68 |
| **SocINDEX with full text**<br>(EBSCO platform) | S1 gang or gangs OR gangster OR gangland [All Fields]<br>S2 (DE 'GANGSTERS') OR (DE 'YOUTH gangs') OR (DE 'GANGS') OR (DE 'Juvenile gangs') OR (DE 'GANG members')<br>S3 S1 OR S2<br>S4 Suppress* OR deterrence OR reduc* OR (Community ADJ polic*) OR curfew* OR truan* OR anti-gang or policing OR (gang ADJ injunction*) OR recidivism OR combat* [All Fields]<br>S5 crim* OR violen* OR intimidate* OR threat* OR vandal* OR menace* OR offen* OR arrest* OR victim*<br>S6 S3 AND S4 AND S5<br><br>Results (n=1,368) were limited to records found in academic journals and in the English language | 278 |
| **Social Policy and Practice**<br>(Ovid platform) | 1. (gang or gangs or gangster or gangland).tw.<br>2. (Suppress* or deter* or reduc* or (Community adj polic*) or curfew* or anti-gang or policing or (gang adj injunction*) or recidivism or combat*).tw.<br>3. (crim* or violen* or intimidate* or threat* or vandal* or menace* or offen* or arrest* or victim*).tw<br>4. 1 and 2 and 3 | 117 |
| | **Total** | **1,101** |

# Appendix 3: Quality appraisal of included studies

## Quality assessment scores for systematic reviews

Reviews were quality appraised using the Health Evidence Quality Assessment Tool for review articles. This tool scores each review based on the following dimensions: a clearly focused research question, the provision of inclusion criteria, a comprehensive search strategy, a search strategy which includes an adequate number of years, the description of the level of evidence of included studies, the quality assessment of included studies, the transparency of quality assessments, the appropriateness of the approach to synthesis, the use of study weighting, and the interpretation of the results. Specifically, it requires a 'yes' or 'no' answer to each of the following questions: 1) Did the authors have a clearly focused question [population, intervention (strategy), and outcome[s]? 2) Were appropriate inclusion criteria used to select primary studies? 3) Did the authors describe a search strategy that was comprehensive? 4) Did the search strategy cover an adequate number of years? 5) Did the authors describe the level of evidence in the primary studies included in the review? 6) Did the review assess the methodological quality of the primary studies? 7) Are the results of the review transparent? 8) Was it appropriate to combine the findings across case studies? 9) Were appropriate methods used for combining or comparing results across studies? 10) Do the data support the author's interpretation? 'Yes' responses were tallied and summed, providing an overall score. A study scoring 8 or higher will be rated as strong, 5–7 as moderate, and 4 or lower as weak.

| Systematic reviews | Quality assessment score | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Abt and Winship (2016) | 10 – High | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Braga and Weisburg (2012) | 6 – Moderate | Yes | Yes | Yes | No | Yes | No | No | Yes | No | Yes |
| Campie and Petrosino (2013) | 8 – High | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes | Yes |
| DuBois (2011) | 7 – Moderate | Yes | Yes | No | Yes | Yes | No | No | Yes | Yes | Yes |
| Farrington and Welsh (2003) | 8 – High | Yes | Yes | Yes | Yes | Yes | No | No | Yes | No | Yes |
| Fisher *et al.* (2008a) | 5/5 No studies for inclusion – Moderate | Yes | Yes | Yes | Yes | Yes | N/A | N/A | N/A | N/A | N/A |

| Systematic reviews | Quality assessment score | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Gravel (2013) companion paper to Wong *et al*. (2012) | 8 – High | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes |
| Hodgkinson (2009) | 10 – High | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Huey (2016) | 4 – Low | Yes | Yes | Yes | No | Yes | No | No | No | No | No |
| Lipsey (2009) | 9 – High | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Littell (2005) | 10 – High | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Livingstone (2013) | 10 – High | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| National Crime Prevention Centre (2007). Companion piece to Smith-Moncrieffe (2013) | 5 – Moderate | Yes | Yes | No | Yes | Yes | No | No | No | No | Yes |
| O'Connor and Waddell (2015) | 6 – Moderate | Yes | Yes | Yes | No | Yes | No | No | Yes | No | Yes |
| Petrosino *et al*. (2004; 2013) | 10 – High | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Petrosino and Campie (2015). Companion piece to Campie and Petrosino (2013) | 7 – Moderate | Yes | Yes | Yes | No | Yes | No | No | Yes | Yes | Yes |
| Roo and James (2011) | 9 – High | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Piquero (2008) | 10 – High | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Piquero (2010) | 10 – High | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Wilson (2005) | 9 – High | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Wong (2012) | 8 – High | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes |

# Quality assessment scores for grey research reports

The research reported in grey literature was quality appraised using the AACODS checklist. The checklist examines six major characteristics of each study: authority (author, organization, reference list), accuracy (aim, methods, peer review, credible data and sources), coverage (parameters and limits), objectivity (bias), date, and significance (relevance and context).

| Report | Authority (3) | Accuracy (9) | Coverage (1) | Objectivity (2) | Date (1) | Significance (7) | Total (23) |
|---|---|---|---|---|---|---|---|
| Smith-Moncrieffe (2013) | Yes 2/3 | Partly 4/9 | Yes 1/1 | No 0/2 | Yes 1/1 | Partly 4/7 | Moderate 12/23 |

## Quality assessment scores for primary studies

Primary studies were quality appraised using the McGill Mixed Methods Appraisal Tool – Version 2011 (MMAT). This tool has been designed for the appraisal stage of literature reviews that include qualitative, quantitative, and mixed methods studies. The MMAT considers aspects of quality specific to qualitative studies, quantitative studies (randomized, non-randomized and descriptive) and mixed methods studies. All studies are screened using the following two questions:

a. Are there clear qualitative or quantitative research questions (or objectives), or a clear mixed methods question (or objective)?
b. Do the collected data address the research question (objective)?

Then a series of questions specific to the study design are posed with the 'yes' responses tallied and summed to provide an overall score. Studies scoring 100% are rated as high quality, studies scoring between 50% and 75% as moderate quality, and 25% as low quality.

## Qualitative studies

Qualitative studies were appraised by providing a 'yes', 'no', or 'don't know' response to each of the following questions:

1.1 Are the sources of qualitative data (archives, documents, informants, observations) relevant to address the research question (objective)?
1.2 Is the process for analysing qualitative data relevant to address the research question (objective)?
1.3 Is appropriate consideration given to how findings relate to the context, i.e. the setting in which the data were collected?
1.4 Is appropriate consideration given to how findings relate to researchers' influence, i.e. through their interaction with participants?

| Qualitative studies | Quality assessment score | 1.1 | 1.2 | 1.3 | 1.4 |
|---|---|---|---|---|---|
| Berger *et al.* (2016) | 75% – Moderate | Yes | Yes | Yes | Unsure |
| Bolden (2013) | 75% – Moderate | Yes | Yes | Yes | Unsure |
| Campbell and Hansen (2012) | 75% – Moderate | Yes | Yes | Yes | Unsure |
| Deuchar *et al.* (2016) | 100% – High | Yes | Yes | Yes | Yes |
| Flores (2009) | 75% – Moderate | Yes | Yes | Yes | Unsure |
| Goodwill and Ishiyama (2016) | 75% – Moderate | Yes | Yes | Yes | Unsure |
| Gormally (2015) | 100% – High | Yes | Yes | Yes | Yes |
| Halsey *et al.* (2016) | 75% – Moderate | Yes | Yes | Yes | Unsure |
| Moloney *et al.* (2009) | 75% – Moderate | Yes | Yes | Yes | Unsure |
| Nugent and Schinkel (2016) | 100% – High | Yes | Yes | Yes | Yes |
| Sogaard *et al*. (2015) | 75% – Moderate | Yes | Yes | Yes | Unsure |

## Quantitative studies – randomized controlled trials

Quantitative studies (randomized controlled trials) were appraised by providing a 'yes', 'no', or 'don't know' response to each of the following questions:

2.1 Is there a clear description of the randomization (or an appropriate sequence generation)?
2.2 Is there a clear description of the allocation concealment (or blinding when applicable)?
2.3 Are there complete outcome data (80% or above)?
2.4 Is there low withdrawal/dropout (below 20%)?

| Quantitative studies Randomized controlled trials | Quality assessment score | A | B | 2.1 | 2.2 | 2.3 | 2.4 |
|---|---|---|---|---|---|---|---|
| Esbensen *et al.* (2013) | 75% – Moderate | Yes | Yes | Yes | No | Yes | Yes |

## Quantitative studies – non-randomized

Quantitative studies – non-randomized were appraised by providing a 'yes', 'no', or 'don't know' response to each of the following questions:

Are participants (organizations) recruited in a way that minimizes selection bias?

3.1 Are measurements appropriate (clear origin, or validity known, or standard instrument; and absence of contamination between groups when appropriate) regarding the exposure/intervention and outcomes?
3.2 In the groups being compared (exposed vs. non-exposed; intervention vs. control; cases vs. controls), are participants comparable, or do researchers take into account (control for) the difference between these groups?
3.3 Are there complete outcome data (80% or above), and, when applicable, an acceptable response rate (60% or above), or an acceptable follow-up rate for cohort studies (depending on the duration of follow-up)?

| Quantitative Studies Non-randomized | Quality assessment score | A | B | 3.1 | 3.2 | 3.3 | 3.4 |
|---|---|---|---|---|---|---|---|
| Corsaro and Engel (2015) | 100% – High | Yes | Yes | Yes | Yes | Yes | Yes |
| Papachristos and Kirk (2015) | 75% – Moderate | Yes | Yes | Yes | Yes | Yes | No |

## Quantitative studies – descriptive

Quantitative studies – descriptive were appraised by providing a 'yes', 'no', or 'don't know' response to each of the following questions:

4.1 Is the sampling strategy relevant to address the quantitative research question (quantitative aspects of the mixed methods question)?
4.2 Is the sample representative of the population under study?
4.3 Are the measurements appropriate (clear origin, or validity known, or standard instrument)?
4.4 Is there an acceptable response rate (60% or above)?

| Quantitative studies Descriptive | Quality assessment score | A | B | 4.1 | 4.2 | 4.3 | 4.4 |
|---|---|---|---|---|---|---|---|
| Carson *et al*. (2013) | 75% – Moderate | Yes | Yes | Yes | No | Yes | Yes |
| Hennigan *et al.* (2014) | 100% – High | Yes | Yes | Yes | Yes | Yes | Yes |
| Melde *et al.* (2012) | 75% – Moderate | Yes | Yes | Yes | No | Yes | Yes |
| Melde and Esbensen (2014) | 75% – Moderate | Yes | Yes | Yes | No | Yes | Yes |
| Pyrooz *et al*. (2014) | 100% – High | Yes | Yes | Yes | Yes | Yes | Yes |
| Pyrooz and Decker (2011) | 100% – High | Yes | Yes | Yes | Yes | Yes | Yes |
| Pyrooz *et al.* (2013) | 75% – Moderate | Yes | Yes | Yes | Yes | Yes | Unsure |
| Sweeten *et al.* (2012) | 100% – High | Yes | Yes | Yes | Yes | Yes | Yes |
| Weerman *et al.* (2015) | 100% – High | Yes | Yes | Yes | Yes | Yes | Yes |

## Mixed methods

Mixed methods studies were appraised by providing a 'yes', 'no', or 'don't know' response to each of the following questions as well as questions 1.1 to 1.4 for the qualitative component and the appropriate question set for the quantitative component:

5.1 Is the mixed methods research design relevant to address the qualitative and quantitative research questions (or objectives), or the qualitative and quantitative aspects of the mixed methods question (or objective)?
5.2 Is the integration of qualitative and quantitative data (or results) relevant to address the research question (objective)?
5.3 Is appropriate consideration given to the limitations associated with this integration, i.e. the divergence of qualitative and quantitative data (or results) in a triangulation design?

| Mixed methods studies | Quality assessment score | A | B | 1.1 | 1.2 | 1.3 | 1.4 | Quantitative | | | | 5.1 | 5.2 | 5.3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 1 | 2 | 3 | 4 | | | |
| Decker, Pyrooz and Moule (2014) | 50% – Moderate | Yes | Yes | Yes | No | Yes | Unsure | Yes | Yes | Unsure | Yes | Yes | Yes | No |
| O'Neal *et al.* (2014) | 50% – Moderate | Yes | Yes | Yes | No | Yes | Unsure | Yes | Unsure | Yes | Unsure | Yes | Yes | No |

# Appendix 4: Data extracted from included studies

## Gang membership prevention

### Intervention model: Community engagement

**Programme description:** Community engagement, data sharing, and partnership building have a role in prevention of youth violence and gang involvement.

| Sample programmes and effect | Relevant studies |
|---|---|
| Broadly speaking, there is a strong, valid argument that community engagement, data sharing, and partnership building between young people, families, schools, communities and public services can be important in identifying local risk and protective factors, identifying those with the greatest need, and supporting gang and violence prevention efforts. | O'Connor and Waddell (2015) |
| It was not possible to identify any robust evaluations of specific community-based programmes to provide an indication of their effectiveness. This evidence gap has been noted in other reviews. | O'Connor and Waddell (2015) |

### Intervention model: *Universal prevention*: Parent and child skills-based programmes

**Programme description:** The majority of the universal programmes identified were school based with or without parental involvement, but some are based between home and community.

Drug Abuse Resistance Education (DARE) is a City of Los Angeles Government substance abuse prevention education programme that seeks to prevent use of controlled drugs, membership in gangs, and violent behaviour. It was founded in Los Angeles in 1983.

Gang Resistance Education And Training (GREAT) is a gang and violence prevention programme built around school-based, law enforcement officer-instructed classroom curricula. The programme is intended as an immunization against delinquency, youth violence, and gang membership for children in the years immediately before the prime ages for introduction into gangs and delinquent behaviour.

| Sample programmes and effect | Relevant studies |
|---|---|
| *School curriculum and skills-based programmes*<br>These programmes typically deliver a core curriculum through a series of information and skills-based sessions delivered to whole classes. They are mostly interactive, involving skill demonstrations and skill practice through role-play and games, for example.<br>LifeSkills Training<br>Positive Action<br><br>*School-wide climate change programmes*<br>These programmes aim to create positive and safe learning environments at a school-wide or classroom level, and to build and encourage positive relationships between the school, parents, students, and the community.<br>Olweus Bullying Prevention Programme<br><br>*Classroom management programmes*<br>These programmes aim to reduce aggressive, disruptive, and other behavioural problems while promoting social and emotional skills (e.g., problem-solving, empathy) and a positive learning environment. They equip teachers with methods to manage difficult behaviour and encourage prosocial behaviour among students.<br>The Good Behaviour Game<br>Incredible Years: Teacher<br><br>*Parent/family training programmes*<br>These programmes aim to equip parents with the knowledge and skills to guide their child, and enhance positive parent-child interactions and family protective factors.<br>Strengthening Families Programme, 10–14<br>Families and Schools Together | O'Connor and Waddell (2015) |
| **Effect**<br>O'Connor and Waddell (2015) identified 27 universal prevention programmes. Twenty-one were judged to be effective and six were judged as ineffective. Collectively, programmes that worked had positive effects on outcomes such as: violent, criminal, and antisocial behaviour, dating violence and abuse, delinquency, conduct problems, fighting, aggression, substance initiation and use, sexual behaviours, problem-solving, and empathy. | O'Connor and Waddell (2015) |
| DARE and GREAT I are the only universal prevention programmes presented in this review and the reasons why they failed are discussed. Klein and Maxson (2006) contend that four basic factors explain the failure of the GREAT programme: police officers delivered the programme; the programme was based on untested conventional wisdom that attitudinal variables or life skills trigger the attractiveness of gang membership; the content of the curriculum failed to incorporate the existing knowledge about gangs and it was not targeted at those most at risk of joining gangs. NCPC (2007)<br>The rapid evidence review alludes to the effectiveness of early intervention universal prevention programmes to prevent delinquency. | NCPC (2007) |

| Sample programmes and effect | Relevant studies |
|---|---|
| Five studies were assigned to the preventive awareness category. Four of these five studies were evaluations of school-based gang prevention programmes and had measures relating to behaviour. Across the four remaining studies, the only significant treatment effect found was for lower rates of gang membership in the evaluation of the GREAT II programme at year 1.<br><br>*Gang Resistance Education And Training Programme (GREAT) - Version II four-year evaluation*<br>This is a school-based cognitive behavioural programme for 6th or 7th grade (aged 12 to 13 years) to prevent gang membership, violence and criminal activity as well as encourage a positive relationship with police. The curriculum is based on two school-based programmes: LifeSkills training and the Seattle Social Development Model. The 13-lesson programme is taught by police officers and supported by teachers. The programme was tested using a quasi-randomized control trial in seven cities in 31 schools among 195 classes (102 received GREAT and 93 did not receive the programme). The four-year follow-up, which had a 70% response rate, found that participants were 39% less likely to join a gang at 12 months after the training and 24% less likely to join a gang at 48 months after the training. The loss to follow-up was 30% and the authors comment that at-risk youth were more likely to be lost to follow-up, so the reduction in joining gangs may be an overestimate. | Wong *et al.* (2012)<br><br>Esbensen *et al.* (2013) |

## Intervention model: *Targeted or selective prevention:* Parent skills-based programmes for at-risk children aged 0–3 years

**Programme description:** Two commonly used and widely recognized approaches, particularly in relation to younger children, are home visiting programmes and parent training programmes; the latter are sometimes completed in a group approach. These programmes work through strengthening relationships between children and their parents/carers and to help parents develop effective responses to a child's negative behaviour. Such programmes can have immediate impacts on child behaviour and parenting practices.

| Sample programmes and effect | Relevant studies |
|---|---|
| Home visiting programmes (such as Family Nurse Partnership)<br>Parent training programmes (such as Incredible Years Parenting Programme and Triple P Positive Parenting Programme Level 2 and 3 Parent Child Interaction Therapy for parents and guardians).<br><br>**Effect**<br>Overall, there is good evidence to suggest that interventions which develop parenting skills, which support families, and which strengthen relationships between children and their parents/carers can have immediate impacts on child behaviour and parenting practices. However, research on long-term outcomes, such as young people's risk of involvement in future antisocial behaviour, delinquency, and crime, is more limited. O'Connor and Waddell (2015) | O'Connor and Waddell (2015)<br><br>Piquero (2008) |

| Sample programmes and effect | Relevant studies |
|---|---|
| Farrington and Welsh (2003) calculated effect sizes for delinquency outcomes when the target children were adolescent or adults for two studies (Olds *et al.,* 1998; Reynolds *et al.,* 2001). The intervention was based on nurse visiting or nursery-based parent training while the target child was between 0 and 3 years.<br><br>Data on long-term outcomes were not included in the meta-analysis. They found a long-term effect size of 0.54 for arrests for Olds *et al.* (1998), and 0.28 for the same outcome for Reynolds *et al.* (2001). | Farrington and Welsh (2003) |
| Results of the Piquero *et al*. review indicate that early family/parent training is an effective intervention for reducing short-term behavioural problems among young at-risk children and the weighted effect size was 0.35 approximately, corresponding to 50% recidivism in the control group compared with 33% recidivism in the experimental group. The results demonstrated that there were significant differences in the effect sizes of studies conducted in the US versus those conducted in other countries, and that studies that were based on samples smaller than 100 children had larger effect sizes. Sample size was also the strongest predictor of the variation in the effect sizes. Piquero *et al*. completed a narrative analysis of the long-term delinquency outcomes and concluded that, overall, family and parent training for at-risk parents reduced their children's level of delinquency in adolescence and crime in adulthood. Most studies demonstrated an improvement in behaviour. | Piquero *et al.* (2008) |

## Intervention model: *Targeted or selective prevention*: Parent and/or child skills-based programmes targeting at-risk children tended to be school based and/or family focused. Occasionally, they are family and community focused.

**Programme description:** Programmes involve demonstrations, practice and activities that aim to develop young people's abilities to control their behaviour and/or participate in prosocial activities. These programmes all aim to prevent, delay, or reduce risk factors and negative outcomes, as well as improve skills and enhance positive outcomes. Most of the programmes are delivered with small groups of children or young people who have been referred by a professional because they are displaying concerning behaviour for example.

Cognitive behavioural interventions are based on the principle that thinking (an internal behaviour) controls overt actions (external behaviour). Therefore, through cognitive behavioural interventions (or curricula), at-risk populations learn new skills and new ways of thinking that can lead to changes in their behaviour and actions, and ultimately affect their conduct. Cognitive behavioural interventions use a combination of approaches to increase attendees' awareness of self and others. This awareness is coupled with the teaching of social skills to assist the attendees with intrapersonal and interpersonal problems. In other words, these specific types of intervention programmes assist attendees in restructuring the thought process and teach cognitive skills to assist in basic decision-making and problem-solving.

Self-control is the ability to control impulses and reactions, and is another name for self-discipline. Self-control is vital for overcoming obsessions, fears, addictions, and any kind of unsuitable behaviour. It puts you in control of your life, your behaviour, and your reactions. Self-control improvement programmes provide strategies to deal with impulses and triggers.

| Sample programmes and effect | Relevant studies |
|---|---|
| *School curriculum and skills-based programmes*<br>These programmes all aim to prevent, delay, or reduce risk factors and negative outcomes, as well as improve skills and enhance positive outcomes. Most of the programmes are delivered with small groups of children or young people, who have been referred by a teacher or another professional because they are displaying concerning behaviour for example.<br>Incredible Years Child Training Programme – Small Group Dinosaur Curriculum<br>Reconnecting Youth – A Peer Group Approach to Building Life Skills<br>Early self-control improvement programmes<br><br>*Combined school and family programmes*<br>These programmes combine child training or tutoring with parent training, family training, or home visits. They all aim to reduce risk factors and increase protective factors. The child training components tend to be group based, whereas the parent/family components are a mix of one-to-one and group formats.<br>Schools and Families Educating Children | O'Connor and Waddell (2015) |
| **Effect**<br>Overall, there is a strong argument that the most effective and well-evidenced approaches tend to have 'therapeutic' principles, meaning they aim to create positive changes in the lives of young people and/or their families, as well as prevent negative outcomes. This includes, for example, skills-based, parent-/family-focused, and therapy-based programmes. Overall, skills-based interventions had a statistically significant, small- to medium-sized effect in reducing child behavioural problems. This was true for both home visiting and parent training programmes, which had similar effects on child behaviour. These effects were significantly larger for studies conducted in the US compared to those conducted in other countries, such as the UK, Australia, and Canada. O'Connor and Waddell (2015) | O'Connor and Waddell (2015) |
| Names of specific cognitive-behavioural intervention programmes: no names provided<br>No evidence from randomized controlled trials or quasi-experimental studies exists (as of 2008) regarding the effectiveness of cognitive behavioural interventions for gang prevention. Fisher (2008) | Fisher (2008) |

| Sample programmes and effect | Relevant studies |
|---|---|
| Names of specific early family/parent training programmes: no names provided<br>Results of the Piquero *et al.* review indicate that early family/parent training is an effective intervention for reducing short-term behavioural problems among young children and the weighted effect size was 0.35 approximately, corresponding to 50% recidivism in the control group compared with 33% recidivism in the experimental group. The results demonstrated that there were significant differences in the effect sizes of studies conducted in the US versus those conducted in other countries, and that studies which were based on samples smaller than 100 children had larger effect sizes. Sample size was also the strongest predictor of the variation in the effect sizes. Piquero *et al*. completed a narrative analysis of the long-term delinquency outcomes and concluded that, overall, family and parent training for at-risk parents reduced their children's level of delinquency in adolescence and crime in adulthood. Most studies demonstrated an improvement in behaviour. Piquero (2008) | Piquero *et al.* (2008) |
| Names of specific self-control improvement programmes: no names provided<br>The studies included in this systematic review indicate that self-control improvement programmes are an effective intervention for improving self-control and reducing delinquency and problem behaviours up to the age of 10 (considered short-term effects), and that the effect of these programmes appears to be robust across various weighting procedures, and across context, outcome source, and based on both published and unpublished data.<br><br>The authors conclude that self-control improvement programmes should continue to be used to improve self-control and reduce delinquency and behavioural problems up to age 10, which is the age cut-off where Gottfredson and Hirschi argue that self-control becomes relatively fixed and no longer malleable. Piquero (2010) | Piquero *et al.* (2010) |

## Intervention model: *Targeted or selective prevention*: Mentoring (Youth mentoring)

**Programme description:** Mentoring programmes involve an older or more experienced person offering support and guidance to a young person over a period of time (longer than three months).

In the conceptual model of youth mentoring described by DuBois, it is essential first and foremost for a strong and meaningful personal connection to be forged between the young person and mentor. This assumption is in line with research that underscores the benefits of emotional attunement and support in youth relationships with parents, teachers, and others, including mentors who are assigned to work with youth through programmes. A close connection, however, frequently may be the by-product, not the focus, of effective mentoring relationships for young persons. Youth, for example, often may come to trust and appreciate their mentors in the context of working with them on goal-oriented tasks. Some evidence, in fact, suggests that it may be of limited value or even counterproductive for mentors to regard cultivating an emotional connection with a youth as the primary goal or, similarly, to foster relationships that are unconditionally supportive and lacking in structure.

Overall, the DuBois model suggests that when relationships with non-parental adults are experienced by youth as meaningful and supportive, they can serve as a catalyst for several intertwined developmental and interpersonal processes that, in turn, help young people to both avoid problems and reach their full potential.

DuBois notes that the potential differences in programme design and in the characteristics of participating youth and mentors have consequences for observed levels of effectiveness.

Mentoring programmes for youth are commonplace in the US, serving an estimated three million young people. In the typical programme, each youth is paired with a volunteer from the community, with the aim of cultivating a relationship that will foster the young person's positive development and well-being. Programmes frequently focus on children and adolescents.

| Sample programmes and effect | Relevant studies |
|---|---|
| *Other community-based programmes*<br>These programmes include mentoring and youth development and leadership.<br>Big Brothers Big Sisters Community-Based Mentoring; Joven Noble.<br><br>**Effect**<br>While initial evidence suggests that mentoring can have beneficial effects, programmes can vary substantially and, on the whole, our knowledge about 'what works' is limited and predominantly US based. Looking at high-risk youth, Lipsey's (2009) meta-analytic overview of studies with control groups found that mentoring interventions for young offenders were associated with a 21% reduction in recidivism. In a rapid evidence assessment of the effects of mentoring for individuals at risk of offending or apprehended by the police, mentoring was associated with a 4—11% reduction in subsequent offending (Jolliffe and Farrington, 2007). For children and young people more generally, one systematic review and meta-analysis of randomized and quasi-experimental designs with control/comparison groups found mentoring to have small positive effects across behavioural, social, emotional, and academic domains (DuBois *et al*., 2011). Mentoring has a small but positive effect on conduct problems (0.21, 0.11—0.31) Several other aspects of DuBois' findings, however, underscore a need for caution. These include a failure of evaluations to assess several key outcomes of policy interest (e.g., juvenile offending, obesity prevention) or to determine whether benefits for youth are sustained at later points in their development. DuBois (2011). O'Connor and Waddell (2015). | O'Connor and Waddell (2015)<br><br>DuBois (2011) |

## Intervention model: *Targeted or selective prevention*: Education and employment opportunities provision

**Programme description:** Opportunities provision is a commonly used gang prevention strategy based on anomie and strain theories and the belief that giving youth educational and employment opportunities, such as tutoring or job training and placement, will reduce gang involvement.

| Sample programmes and effect | Relevant studies |
|---|---|
| Names of specific opportunities provision programmes: no names provided<br><br>**Effect**<br>No evidence from randomized controlled trials or quasi-experimental studies currently exists regarding the effectiveness of opportunities provision for gang prevention. Rigorous primary evaluations of gang prevention strategies are crucial to develop this research field, justify funding of existing interventions, and guide future gang prevention programmes and policies. Fisher (2008b). | Fisher (2008b) |

## Intervention model: *Targeted or selective prevention:* Sports programmes

**Programme description:** Sports programmes in the community aim to engage youth in prosocial activities and increase self-esteem.

| Sample programmes and effect | Relevant studies |
|---|---|
| They aim to provide opportunities for youth to engage in supervised prosocial activities, learn new skills, build their self-esteem, and develop trust between youth, schools, police, and communities.<br><br>**Effect**<br>While there is initial evidence to suggest these programmes may reduce youth crime and violence, this largely comes from studies using weak evaluation designs. The evidence is interesting as a broad and preliminary indication of possible effectiveness, but because most of the studies had small sample sizes and lacked control groups, it is difficult to determine whether these sports-based programmes genuinely caused the outcomes measured and so the findings should not be overstated. O'Connor and Waddell (2015). | O'Connor and Waddell (2015) |

## Intervention model: *Targeted or selective prevention:* Harmful or ineffective prevention strategies: Deterrence and discipline

**Programme description:** Deterrence programmes aim to deter youth from criminal behaviour or reoffending by dramatizing the negative consequences of the behaviour. Prototypical programmes involve organized visits to prison facilities by juvenile delinquents or children at risk of becoming delinquent, such as 'Scared Straight'. The programmes are designed to deter participants from future offending by providing first-hand observations of prison life and interaction with adult inmates.

Disciplinary interventions are based on the idea that youth must learn discipline to avoid reoffending and structured regimens, such as paramilitary regimens or boot camps, impose such discipline on them. In the typical correctional boot camp, participants are required to follow a rigorous daily schedule of activities, including drill and ceremony and physical training, similar to that of a military boot camp. Punishment for misbehaviour is immediate and swift and usually involves some type of physical activity such as push-ups. Boot camps differ substantially in the amount of focus given to the physical training and hard labour aspects of the programme versus therapeutic programming such as academic education, drug treatment or cognitive skills.

| Sample programmes and effect | Relevant studies |
|---|---|
| *Prison visits and military-type boot camps*<br><br>**Effect**<br>Robust reviews and studies have shown that approaches to preventing youth crime and violence based on deterrence and/or discipline are ineffective and may even make things worse, particularly for young people who are at risk or already involved in delinquency and offending. O'Connor and Waddell (2015)<br><br>Petrosino and colleagues conclude that programmes such as 'Scared Straight' are likely to have a harmful effect and increase delinquency among youths relative to doing nothing at all. Given these results, we cannot recommend this programme as a crime prevention strategy. Petrosino (2013)<br><br>After adjusting for study methodology, the characteristics of juveniles involved in the study, and the level of juvenile justice supervision, the mean recidivism rate for deterrence and disciplinary programmes was 0.51 and 0.54, respectively, representing a 2% and 8% increase from a mean control group recidivism rate of 0.50. Lipsey *et al.* (2009) conclude that deterrence and disciplinary programmes have a small to moderately harmful effect and should not be used.<br><br>The current evidence suggests that this common and defining feature of a boot camp is not effective in reducing post-boot-camp offending. Wilson (2005) | O'Connor and Waddell (2015)<br><br>Petrosino *et al.* (2013)<br><br>Lipsey (2009)<br><br>Wilson *et al.* (2005) |

## Intervention model: *Risk assessment:* Identifying high-risk youth for targeted or indicated prevention

**Programme description:** Method of strengthening the indicated prevention component by improving the identification of youth at high risk of gang joining

| Sample programmes and effect | Relevant studies |
|---|---|
| Development and testing the Gang Risk of Entry Factors assessment questionnaire<br>*Identified risk factors for gang entry*<br>Cumulative exposure to stressful life events<br>Non-delinquent problem behaviours<br>Delinquent beliefs<br>Poor parental supervision<br>Affective dimensions of peer networks<br>Characteristics of peer networks<br>Early delinquent behaviour<br><br>*Identify means of measurement in questionnaire*<br>Goodman Strengths and Difficulties Questionnaire for antisocial tendencies<br>Grasmick *et al.* general measure of self-control of impulses<br>Esbensen and Osgood scale to measure delinquent beliefs<br>Esbensen and Osgood scale to measure parental monitoring<br>Esbensen and Osgood scale to measure peer influence<br>Esbensen and Osgood scale to measure peer delinquency<br><br>The authors developed and applied calibrated cut-off points.<br>The findings confirm the assessment's effectiveness in prospectively identifying the youth most likely to join a gang within impacted communities. In the study sample, 100% of the boys who reported current gang membership, 81% of the boys who report former gang membership, and 74% of the boys who reported hanging out with the gang at the post-test had been identified as high risk (score >75th percentile) 12 to 18 months earlier on the baseline assessment. All but one of the 14 girls in the study who reported any gang involvement (including just hanging out) on the post-test had been assessed as high risk on the baseline interview. | Hennigan *et al*. (2014) |

## Intervention model: *Targeted or indicated prevention:* Family-focused programme for high-risk children and young people and their parents or guardians

**Programme description:** Indicated prevention programmes targeting high-risk children tended to be family focused and/or therapy based. Family-focused programmes that include home visiting, parent training and family therapy. Both programmes acknowledge that changing behaviours among young people with complex home lives is difficult and the programmes are based on the families' risk and protective factors.

Multisystemic Therapy is an intensive, family- and community-based treatment model that addresses the various determinants of serious criminal and antisocial behaviour in adolescents and their families. It targets chronic and violent young offenders, usually aged 12 to 17, and their families. The therapy reduces antisocial and other clinical problems in adolescents, reduces out-of-home placements, and empowers families to resolve future difficulties. This is achieved by providing parents with the necessary skills and resources required to raise teenagers, and giving youth the skills they need to adequately cope with a collection of individual, family, peer, school and neighbourhood problems and challenges. The therapy uses a home-based model of services delivery. This model helps to, for instance, overcome obstacles

associated with service access, increase family participation and retention in treatment, facilitate the provision of intensive services whereby therapists typically have low caseloads, and enhance the maintenance and sustainability of treatment gains. It views individuals as being situated within a complex network.

| Sample programmes and effect | Relevant studies |
|---|---|
| *Family-focused therapy-based programmes*<br>Generally, these programmes aim to reduce problem behaviours in young people and improve family functioning. They work with the young person and their family to equip the family as a whole to tackle the problems faced by the young person and sustain positive changes. The therapist may also take into account wider risk factors such as the influence of deviant peer groups, and liaise with other services and the young person's school, for example.<br>Functional Family Therapy; Multidimensional Family Therapy; Multidimensional Treatment Foster Care – Adolescent; Multisystemic Therapy<br><br>*Trauma-focused therapy-based programmes*<br>These programmes aim to reduce the symptoms of post-traumatic stress disorder (PTSD) or the emotional and/or behavioural problems associated with exposure to traumatic life events, and to increase positive functioning and improve coping skills. They primarily work with the young person in individual or group sessions. Therapy is structured around key cognitive behavioural therapy techniques (e.g., psychoeducation, relaxation skills, exposure), helping the young person to process and manage their traumatic memories and be better equipped to deal with stresses in the future.<br>Multisystemic Therapy for Youth with Problem Sexual Behaviors; Trauma-focused Cognitive Behavioural Therapy | O'Connor and Waddell (2015) |
| **Effect**<br>Outcome measures included archival data (police and court records) on arrests and/or convictions for criminal offences and incarceration in studies of juvenile offenders in the US and Canada. Measures of behavioural, psychosocial, and family outcomes were examined. Behavioural outcomes included antisocial behaviour (as measured by arrest or conviction of a criminal offence), drug use (self-reports and drug tests), and school attendance.<br>The most rigorous (intent-to-treat) analysis found no significant differences between MST and usual services in restrictive out-of-home placements and arrests or convictions. Pooled results that include studies with data of varying quality tend to favour Multisystemic Therapy (MST), but these relative effects are not significantly different from zero. The study sample size is small and effects are not consistent across studies; therefore, it is not clear whether MST has clinically significant advantages over other services. Littell *et al.* (2005). | Littell *et al*. (2005) |
| Fisher (2008a). No evidence from randomized controlled trials or quasi-experimental studies exists (as of 2008) regarding the effectiveness of cognitive behavioural interventions for gang prevention. | Fisher *et al*. (2008a) |

| Sample programmes and effect | Relevant studies |
|---|---|
| The authors classify Multisystemic Therapy as an example of best practice to prevent or reduce delinquency measured by reductions in levels of re-arrest and out-of-home placements. They also say that evidence of family functioning and mental health outcomes is promising. NCPC (2007). | NCPC (2007) |
| Overall, there is a strong argument that the most effective and well-evidenced approaches tend to have 'therapeutic' principles, meaning they aim to create positive changes in the lives of young people and/or their families, as well as prevent negative outcomes. This includes, for example, skills-based, parent-/family-focused, and therapy-based programmes. Multisystemic Therapy and parent training (compared to no intervention) are the more effective methods for healing with high-risk children. The least effective were school based, which failed to have a statistically significant impact. O'Connor and Waddell (2015). | O'Connor and Waddell (2015) |

## Intervention model: *Targeted or indicated prevention:* Counselling of juvenile offenders at high risk of escalating criminal or gang involvement

**Programme description:** This diverse and popular programme approach is characterized by a personal relationship between the offender and a responsible adult who attempts to exercise influence on the juvenile's feelings, cognitions, and behaviour. Family members or peers may also be involved and the peer group itself may take the lead role in the relationship. The major variants of this intervention approach are the following: individual counselling, mentoring, family counselling, short-term crisis counselling, group counselling led by a therapist, peer support programmes, mixed counselling with/without supplementary referrals.

| Sample programmes and effect | Relevant studies |
|---|---|
| After adjusting for the study methodology, the characteristics of the juveniles involved in the study, and the level of juvenile justice supervision, the mean recidivism rate for counselling interventions was 0.43, representing a 13% decrease from a mean control group recidivism rate of 0.50. This suggests a strong effect on reducing recidivism. | Lipsey (2009) |

## Intervention model: *Targeted or indicated prevention:* Skill-building programmes for juvenile offenders at high risk of escalating criminal or gang involvement

**Programme description:** These programmes provide instruction, practice, incentives, and other such activities and inducements aimed at developing skills that will help the juvenile control their behaviour and/or enhance their ability to participate in normative prosocial functions. These programmes include: behavioural programmes (behaviour management, contingency contracting, token economies, and other such programmes that reward selected behaviours), cognitive behavioural therapy, social skills training, challenge programmes (experiential learning by mastering difficult or stressful tasks), academic training, job-related interventions.

| Sample programmes and effect | Relevant studies |
|---|---|
| After adjusting for the study methodology, the characteristics of the juveniles involved in the study, and the level of juvenile justice supervision, the mean recidivism rate for skill-building programmes was 0.44, representing a 12% decrease from a mean control group recidivism rate of 0.50. This suggests a strong effect on reducing recidivism. | Lipsey (2009) |

## Intervention model: *Targeted or indicated prevention:* Multiple coordinated services for juvenile offenders at high risk of escalating criminal or gang involvement

**Programme description:** Programmes in this category are not organized around a primary service type or a combination of a few such service types, but rather are designed to provide a package of multiple services which may be basically similar for all participating juveniles or may be individuated with different juveniles receiving different services. This category includes:

1) Case management: a designated case manager or case team develops a service plan for each juvenile, arranges for the respective services, and monitors progress
2) Service broker: referrals are made for the service or services deemed appropriate for each juvenile with a relatively minimal role for the broker afterwards
3) Multimodal regimen: a multimodal curriculum or coordinated array of services is provided to all participating juveniles, often occurring in a residential setting.

Wraparound programmes are an example of multiple services coordinated around an individual's specific needs. Wraparound Milwaukee is one of many examples of the wraparound approach. It is a community-based, highly individualized system of care which serves children and youth with serious emotional, behavioural and mental health needs, and their families. The basic philosophy underlying this approach is to identify precisely the community services and supports that a family needs and provide them as long as they are needed. Project Wraparound has been implemented in many different sectors, including child welfare, education, juvenile justice, and mental health. This wraparound approach is based on an identification of the services families really need to care for a child with specific needs. It identifies the personal, community, and professional resources to meet those needs, and it wraps those services around the child and family. Youths can be referred to the programme by probation officers or child welfare workers. The programme targets children who meet the following criteria:

» They have a current mental health problem identified through an assessment tool.
» They are involved in two or more service systems, including mental health, child welfare, or juvenile justice.
» They have been identified for out-of-home placements in a residential treatment centre.
» They could be returned sooner from such a facility with the availability of a wraparound plan and services.

| Sample programmes and effect | Relevant studies |
|---|---|
| After adjusting for the study methodology, the characteristics of the juveniles involved in the study, and the level of juvenile justice supervision, the mean recidivism rate for multiple coordinated services was 0.44, representing a 12% decrease from a mean control group recidivism rate of 0.50. | Lipsey (2009) |

| Sample programmes and effect | Relevant studies |
|---|---|
| To date, there have been several studies that have been conducted which support Wraparound's effectiveness. For example, two randomized clinical trials, conducted in New York and Florida, showed favourable results for children and youth participating in the wraparound process. There were, for example, decreases in behavioural symptoms, thought problems, and rates of delinquency. NCPC (2007). | NCPC (2007) |

## Intervention model: Gang-specific prevention approaches

**Programme description:** Gang-specific approaches aim to prevent young people from becoming involved in gangs and to help them to find ways out if they do.

Youth Gang Prevention Fund (YGPF) intervention projects aimed at reducing the number of gang-involved youth in communities with a known or emerging gang problem. To determine what works in gang crime prevention, 14 impact evaluation studies of gang projects were conducted across Canada.

| Sample programmes and effect | Relevant studies |
|---|---|
| **Effect**<br>In Wong *et al.*, none of the assessments of single treatment (targeted prevention) programme effects on delinquency outcomes demonstrated a significant reduction in gang-joining behaviours. Across the five gang membership prevention programme evaluations, no significant treatment effects were found for gang membership or arrests. The only other significant effect seen across the gang membership prevention programmes was a lower rate of gang involvement found in the evaluation of the Logan Square Prevention project, a comprehensive programme (LSP; Godley *et al.,* 1998). The LSP project involved a coalition of agencies providing school- and community-based prevention services to youths with a focus on reducing substance use and gang involvement. Wong *et al.,* (2012) | Wong *et al*. (2012) |
| Six of the 10 evaluations in Canada measured behavioural outcomes. Four of these six studies (67%) reported results that indicate positive change in at least one behavioural outcome. Behaviours assessed include police contact, violent and non-violent offending and gang involvement. Gang involvement, police contact and non-violent offending behaviour such as theft and selling illegal drugs were the most likely outcomes to be reduced. Violent offending was less likely to be reduced, as most youths in these gang prevention projects did not have a violent offending history. Smith-Moncrieffe (2013).<br><br>*Gang Prevention Strategy* (Violent Offending): There was a statistically significant reduction (22%) in the youth committing physical assaults by the end of the programme. Smith-Moncrieffe (2013).<br><br>*Youth Advocate Programme*: By the end of the programme the youth showed a decrease in delinquency and conduct problems. Reductions in victimization were significant, with a moderate effect size (0.55). Smith-Moncrieffe (2013). | Smith-Moncrieffe (2013) |

| Sample programmes and effect | Relevant studies |
|---|---|
| Surrey Wraparound (police contact): Results show a significant decline (67%) in police contacts relative to the comparison group.<br>*Gang exit* (also known as the gang membership variable) was a key measure in the YGPF projects. Most of the projects targeted both youth at risk of gang involvement and gang-involved youth. The gang exit findings suggest that for the four projects that were able to measure the gang exit rate at the end of the programme, between 41% and 67% of the youth were no longer gang involved by the end of the project. In some projects the evaluators were able to measure the gang exit rate beyond the post-programme period. The RAGS project had 100% of its participants involved in gangs and by the final follow-up stage (approximately 12 months post-programme) had 71% of its participants exit their respective gangs. Similarly, evaluators found that 100% of the youth in the YAAGV project had exited their respective gangs by the final follow-up measure (approximately 12 months post-programme). | |
| While there are a range of strategies and interventions being used to try and prevent young people from becoming involved in gangs and to help them find ways out if they do become involved, there is a lack of robust, high-quality evidence on whether these approaches work. O'Connor and Waddell (2015). | O'Connor and Waddell (2015) |

## Gang alternatives/Desistance from gang-related offending

### Intervention model: Gang alternatives

**Programme description:** Gang alternatives strategies aim to minimize the impact of gang involvement on the individual's future prospects of living a law-abiding life. The goal is to help individuals get out of gangs, to create opportunities to prevent relapse, and give them a legitimate occupation outside of the gang. The activities carried out within this approach include: education and employment programmes and outreach to gang members to give them the option to opt out of the gang lifestyle.

| Sample programmes and effect | Relevant studies |
|---|---|
| Wong *et al.* (2012) identified five evaluations which they classified under this category, including:<br><br>Gang Intervention Through Targeted Outreach (GITTO): an initiative led by the Boys & Girls Clubs of America using outreach to recruit known gang members to join activities, social skills classes, conflict resolution workshops, and education programmes. There is modest evidence based on one quasi-experimental study that the GITTO programme has no discernible impact on gang membership or delinquency.<br><br>San Diego Street Youth Programme: an initiative that targets gang members in specific troubled neighbourhoods and seeks to allow them to live a law-abiding life. The programme aims to assist gang members in obtaining jobs, returning to school and getting job training opportunities. Based on one quasi-experimental study, there is modest evidence of no discernible impact on gang-related crime.<br><br>Gang Employment Programme: targets known gang members, provides them with job leads, and familiarizes them with the job market. Based on one quasi-experimental study, there is modest evidence that the gang employment programme has no discernible impact on reoffending among criminally active gang members compared to those who did not receive the intervention.<br><br>Aggression Replacement Training is a multimodal intervention designed to teach a broad curriculum of prosocial behaviour, anger control training, a method for empowering youth to modify their own anger responsiveness, and moral reasoning training, to help motivate youth to employ the skills learned via the other components. There is modest evidence, based on one methodologically limited quasi-experimental study, of a modest impact on social skills, recidivism, and employment.<br><br>San Antonio Gang Rehabilitation, Assessment and Support Programme: involves outreach workers who target known gang members and provide different types of counselling to the individuals, groups and families and also refer youth to job training and education services. There is modest evidence, based on one quasi-experimental study, of no discernible impact on any of the four crime and violence outcomes measured. | Wong *et al.* (2012) |

# Gang activity prevention

## Intervention model: Gang activity prevention

| Sample programmes and effect | Relevant studies |
|---|---|
| Most of the outcomes assessed by the seven studies evaluating gang activity prevention interventions identified by this review showed no significant impact; however, there were a few promising findings. The study by Fritsch *et al*. (1999) of the Dallas Anti-Gang Initiative reported mixed findings with significant reductions in gang-related violence in some control and some target areas. The evaluation of Operation Cul-de-sac (implementation of street barriers) by Lasley *et al.* (1998) found that the number of violent crimes fell significantly during the programme and rose after the programme ended. Spergel *et al*. (1986) evaluated a gang conflict mediation programme – Crisis Intervention Services Project (CRISP) – and found that rates of increase in violent gang crimes and property crimes were significantly lower in the target versus comparison areas. | Wong *et al.* (2012) |

## Intervention model: Urban renewal

**Programme description:** Urban renewal is a place-based approach to prevention which involves the improvement of various elements of the physical environment, including but not limited to transportation, housing, lighting and vegetation.

| Sample programmes and effect | Relevant studies |
|---|---|
| There is modest evidence based on a review of five studies, with only one randomized controlled trial, of a modest impact on the prevention of crime and violence. This review concluded that urban renewal was associated with reduced crime and improved police legitimacy and collective efficacy; however, the number and quality of studies supporting this finding was limited. | Abt and Winship (2016). See also Cassidy *et al.* (2014) |

## Intervention model: Crime prevention through environmental design (CPTED)

**Programme description:** CPTED is a place-based approach to the prevention of crime and violence which seeks to deter or prevent crime through the manipulation of the physical environment.

| Sample programmes and effect | Relevant studies |
|---|---|
| There is moderate evidence, based on three reviews, of only modest, if any, impact on crime and violence. An unintended consequence of this approach that was observed is that it can undermine collective efficacy by encouraging residents to withdraw behind walls, fences, and fortified homes. | Abt and Winship (2016). See also Cassidy *et al*. (2014), Farrington *et al.* (2007) Welsh and Farrington (2009) |

### Intervention model: Neighbourhood watch

**Programme description:** Neighbourhood watch is a place-based approach which engages community residents to increase surveillance and prevent crime.

| Sample programmes and effect | Relevant studies |
|---|---|
| There is modest evidence, based on one review, of a modest impact on crime and violence. | Abt and Winship (2016). See also Bennett *et al.* (2006) |

## Gang activity suppression

### Intervention model: 'Pulling levers' focused deterrence

**Programme description:** 'Pulling levers' focused deterrence programmes tend to have the following basic framework:

» Selection of a particular crime problem, such as youth homicide or street drug dealing
» Pulling together an interagency enforcement group, typically including police, probation, parole, state and federal prosecutors, and sometimes federal enforcement agencies
» Conducting research, usually relying heavily on the field experience of front-line police officers, to generate a list of key offenders – and frequently groups of offenders, such as street gangs, drug crews, and the like – and the context of their behaviour
» Framing a special enforcement operation directed at those offenders and groups of offenders, and designed to substantially influence that context, for example by using any and all legal tools (or levers) to sanction groups such as crack crews whose members commit serious violence
» Matching those enforcement operations with parallel efforts to direct services and the moral voices of affected communities to those same offenders and groups
» Communicating directly and repeatedly with offenders and groups to let them know that they are under particular scrutiny, what acts (such as shootings) will get special attention, when that has in fact happened to particular offenders and groups, and what they can do to avoid enforcement action. One form of this communication is the 'forum', 'notification', or 'call-in', in which offenders are invited or directed (usually because they are on probation or parole) to attend face-to-face meetings with law enforcement officials, service providers, and community figures (Kennedy, 2006: p. 156-157).

Some programmes also include concurrent public health/media campaigns (Operation Ceasefire Chicago) and community mobilization (Operation Ceasefire Boston, Operation Peacekeeper Stockton, Operation Ceasefire Chicago, Project Safe Neighbourhoods).

| Sample programmes and effect | Relevant studies |
|---|---|
| Operation Ceasefire (Boston/Los Angeles/Newark/Chicago), Project Safe Neighbourhoods (Chicago), Indianapolis Violence Reduction Partnership, Drug Market Intervention (Nashville, Tennessee; Rockford, Illinois), Cincinnati Initiative to Reduce Violence | Braga and Weisburd (2012) Also in Abt and Winship (2016) |
| There is moderate evidence, based on 11 evaluations using quasi-experimental designs, that 'pulling levers' focused deterrence strategies are associated with an overall statistically significant, medium-sized crime reduction effect. This intervention approach has the largest direct impact on crime and violence of any suppression intervention reviewed in this report. | Abt and Winship (2016); Wong *et al.* (2012); Campie *et al*. (2013) |

| Sample programmes and effect | Relevant studies |
|---|---|
| Since the publication of this review, there have been two additional examples of success with this intervention type. First, the Group Violence Reduction Strategy (GVRS) – a 'pulling levers' focused deterrence strategy – was well implemented in the City of New Orleans, a high-trajectory homicide setting. A statistically significant reduction above and beyond changes observed in comparable lethally violent cities was observed. The greatest changes in targeted outcomes were observed in gang homicides, young black male homicides, and gun violence. The decline in targeted violence corresponded with the implementation of the 'pulling levers' notification meetings. This evidence suggests that focused deterrence is a promising violence prevention approach in urban contexts with persistent histories of lethal violence, heightened disadvantage, and undermined police. The authors attribute successful implementation of the intervention to a multi-agency task force and strong political support. A programme manager and intelligence analyst, the use of detailed problem analysis and the integration of research assisted the working group to identify the highest risk groups of violent offenders to target for the notification sessions.<br><br>Second, the Chicago Group Violence Reduction Strategy used social network analysis based on crime statistics and focus groups with gang experts to map the factions that were actively involved in gang violence. They used a 'pulling levers' focused deterrence approach, with a strong emphasis on legitimacy, procedural justice, and social support. Using a quasi-experimental design with treatment and control factions matched by propensity score (the likelihood of receiving the intervention based on faction characteristics), they examined differences between treatment and control on involvement in shootings, victimization, and offending. They found a 23% reduction in shootings after attending a call-in, suggesting that if at least one faction member attended a call-in, that faction would be involved in 23% fewer shootings in the following year. In addition, representation at a call-in led to a 32% reduction in fatal or non-fatal victimization in the following year. Given incomplete data on offending patterns, it can only be concluded that treatment factions are no more likely than control factions to be perpetrators of shootings and may in fact be less likely. | Corsaro and Engel (2015)<br><br>Papachristos and Kirk (2015) |

## Intervention model: Hot spots policing

**Programme description:** A place-based policing strategy which focuses on small geographic areas where crime is concentrated.

| Sample programmes and effect | Relevant studies |
|---|---|
| There is strong evidence, based on a systematic review of 19 evaluations, including 10 randomized controlled trials, that hot spots policing approaches have a modest impact on suppressing crime and violence, with results ranging from no difference to a 33% reduction. Focusing police efforts on micro-locations yields positive benefits. Evidence suggests that crime is not displaced when hot spots are targeted; rather, crime and violence is likely to decrease for those living near or adjacent to hot spots enforcement. | Abt and Winship (2016), Braga and Weisburd (2012) |

## Intervention model: Disorder (broken window) policing

**Programme description:** A place-based policing strategy – disorder policing, also known as broken windows policing, addresses physical and social disorder in neighbourhoods to prevent crime and violence.

| Sample programmes and effect | Relevant studies |
|---|---|
| There is strong evidence, based on a systematic review of 28 evaluations, including nine randomized controlled trials, that disorder policing has a modest impact on suppressing crime and violence. Evidence suggests that certain approaches work better than others, with community- and problem-oriented policing approaches preferred over aggressive zero tolerance strategies which can create community tension and undermine collective efficacy. | Abt and Winship (2016), Braga *et al*. (2015) |

## Intervention model: Community policing

**Programme description:** A place-based policing strategy, which leverages partnerships with residents and the community to reduce crime and disorder.

| Sample programmes and effect | Relevant studies |
|---|---|
| There is moderate evidence, based on a systematic review of 25 studies, including only one randomized controlled trial, that community-oriented policing has no discernible impact on the suppression of crime and violence, although it did positively affect citizen satisfaction, perceptions of disorder and police legitimacy. | Abt and Winship (2016), Gill *et al.* (2015), Skogan and Frydl (2004) |

## Intervention model: Problem-oriented policing

**Programme description:** A people-based policing strategy, which uses analysis to tailor police responses to specific public safety problems using the Scanning, Analysis, Response, Assessment (SARA) method.

| Sample programmes and effect | Relevant studies |
|---|---|
| There is moderate evidence, based on a review of evaluations, including no randomized controlled trials, of a modest impact on the suppression of crime and violence. Problem-oriented policing strategies appear to improve the performance of other policing strategies, such as hot spots, disorder, and community-oriented policing. | Abt and Winship (2016)<br>Weisburd *et al*. (2010) |

### Intervention model: Gun enforcement

**Programme description:** Targeted enforcement of gun laws through hot spots policing of problem areas of gun violence, the use of 'gun courts' to speed up processing of gun crime offenders, enhanced probationary supervision of gun crime offenders, federal prosecution of gun crime offenders, or community interventions involving partnerships to coordinate federal and state resources with local agencies to tackle gun violence from all sides.

| Sample programmes and effect | Relevant studies |
|---|---|
| There is moderate evidence of a moderate impact on suppressing crime and violence.<br><br>Project Safe Neighbourhoods, Detroit's Handgun Intervention Program, Philadelphia's Youth Violence Reduction Partnership, Richmond Virginia's Project Exile, Partnerships to Reduce Juvenile Gun Violence (OJJDP), Operation Eiger, Operation Ceasefire | Abt and Winship (2016); Koper and Mayo-Wilson (2006; Makarios and Pratt (2012) |

### Intervention model: Drug enforcement

**Programme description:** Targeted enforcement of drug laws.

| Sample programmes and effect | Relevant studies |
|---|---|
| There is moderate evidence of a negative impact on violence. Drug enforcement appears to have a limited impact and may actually increase violence by destabilizing drug markets and increasing violence among drug sellers. | Abt and Winship (2016)<br>Mazerolle *et al*. (2006;<br>Werb *et al*. (2011) |

## Corrections-based gang interventions

### Intervention model: Drug courts and treatment

**Programme description:** This is a behaviour-based approach in which people with drug addiction who come before courts for drug-related non-violent crimes and who plead guilty or are convicted of the crimes have the charges placed on hold and/or receive reduced sanctions if they successfully complete a programme of treatment for their addiction.

| Sample programmes and effect | Relevant studies |
|---|---|
| There is strong evidence, based on four reviews which reinforce the well-established finding, that drug treatment and drug courts can significantly reduce recidivism. | Abt and Winship (2016) |

## Intervention model: Aftercare programmes

**Programme description:** Aftercare programmes are designed to direct and support young offenders during their transition from a correctional facility to the community. Common programme elements include: pre-release training/contacts, mentoring, intensive supervision, family counselling, service coordination, and drug testing. They incorporate therapeutic programme approaches (i.e. skill training, counselling, cognitive behavioural therapy) directed at learning prosocial behaviours and attitudes.

| Sample programmes and effect | Relevant studies |
|---|---|
| Family Integrated Transition Programme (FIT); The Boys & Girls Club of America Targeted Re-entry Programme; The Re-entry Services Project (RSP); Boston Re-entry Initiative; Westchester County Aftercare Programme; Juvenile Rehabilitation Administration (JRA) Mentoring Programme; Violent Juvenile Offender Programme; Intensive Supervision and Surveillance Programme; Skillman Intensive Aftercare Programme; Lifeskills '95; South Oxnar Challenge Project; Functional Family Parole; Intensive Aftercare Programme.<br><br>There is moderate evidence, based on a review of 22 randomized controlled or quasi-experimental evaluation studies, of a modest positive but significant impact on reducing recidivism compared to usual or no treatment among youthful offenders. The effects are short term and highly dependent on the quality of intervention implementation. Aftercare seems to have a greater effect when it is individualized and with high-risk populations, such as gang-involved youth. | James *et al*. (2011) |

## Intervention model: Surveillance

**Programme description:** These interventions are based on the idea that closer monitoring of the juvenile will prohibit reoffending. The main programme type is intensive probation or parole oriented towards increasing the level of contact and supervision.

| Sample programmes and effect | Relevant studies |
|---|---|
| After adjusting for the study methodology, the characteristics of the juveniles involved in the study, and the level of juvenile justice supervision, the mean recidivism rate for surveillance was 0.47, representing a 6% decrease from a mean control group recidivism rate of 0.50. | Lipsey (2009) |

## Intervention model: Risk/needs/responsivity interventions

**Programme description:** Risk/needs/responsivity interventions use the risk/needs/responsivity framework to determine how to treat offenders, with the aim of reducing recidivism. The framework is based on three principles: Risk – match the level of service to the offender's risk to reoffending; 2) Need – assess criminogenic needs and target them in treatment; and 3) Responsivity – maximize the offender's ability to learn from a rehabilitative intervention by providing cognitive behavioural treatment and tailoring the intervention to the learning style, motivation, abilities and strengths of the offender.

| Sample programmes and effect | Relevant studies |
|---|---|
| There is strong evidence, based on five reviews, that this approach has a strong impact on preventing recidivism among violent or non-violent adult or juvenile offenders. This approach works in both community and institutional settings and is particularly effective when CBT is incorporated. | Abt and Winship (2016) |

## Intervention model: Restorative justice programmes

**Programme description:** Restorative justice conferencing involves a meeting between the offender, the victim or victims, the supporters of both and a conference coordinator. The conference gives all individuals involved a chance to share their experience and to decide together how best to repair the harm caused by the offence. It is built on the philosophy that providing an opportunity for the offender to make amends for what they have done, along with the victim's forgiveness, increases the satisfaction of all those involved and reduces the likelihood of reoffending. Two main restorative intervention types, often offered in combination, are: 1) restitution (offenders provide financial compensation to victims and/or perform community service) 2) and mediation (offenders apologize to their victims).

| Sample programmes and effect | Relevant studies |
|---|---|
| After adjusting for the study methodology, the characteristics of the juveniles involved in the study, and the level of juvenile justice supervision, the mean recidivism rate for restorative programmes was 0.45, representing a 10% decrease from a mean control group recidivism rate of 0.50.<br><br>There is modest evidence, based on four randomized controlled trials, of no discernible effect of restorative justice conferencing over normal court proceedings for number re-arrested, monthly rate of offending, offenders' remorse, or offenders' recognition of wrongdoing.<br><br>Bethlehem Police Family Group Conferencing Project, Indianapolis Juvenile Restorative Justice Experiment, Reintegrative Shaming Experiment (RISE), Juvenile Property Personal Victims (JPP) Experiment, RISE Juvenile Property Shoplifting (JPS) Experiment | Lipsey (2009)<br><br>Livingstone *et al*. (2013) |

# Comprehensive gang control approaches

## Intervention model: 'Comprehensive' interventions

**Programme description:** 'Comprehensive' interventions were defined by Hodgkinson *et al*. (2009) as intentionally designed multi-faceted approaches encompassing more than one of the following intervention types:

- Educational: focus on education or re-educating the study group, including mentoring and advocacy programmes
- Enforcement: focus on enforcement activity designed to deter gang-related criminal behaviour
- Diversion: focus on diversionary activity designed to turn individuals away from gang-related criminal behaviour
- Organization and management: focus on organization, planning and development, ethos, governance, leadership and management or intentions
- Criminal justice: focus on interventions based in the criminal justice system (i.e. post-offence or post-discharge)
- Psychological: psychological therapeutic interventions (i.e. aggression replacement training, anger management, cognitive behavioural therapy)
- Opportunities provision: focus on provision of new long-term opportunities for those engaged in gang-related criminal behaviour (i.e. employment, housing)
- Social inclusion: focus on interventions which seek to reintegrate the study group into the wider community
- Community mobilization: focus on the engagement and mobilization of the community in addressing gang-related criminal behaviour
- Legal: focus on interventions which relate to legal provisions
- Vocational skills training: focus on interventions which deliver vocational skills to the study group
- Situational: focus on activity which makes physical changes to the local area designed to prevent gang-related criminal behaviour (i.e. lighting, gating).

'Comprehensive' interventions were defined by Wong *et al*. (2012) as those which include at least three strategies from the prevention and gang activity regulation categories and are overseen by the same group, organization or programme manager. This definition emphasizes the crucial importance of inter-agency communication and continuity between programme components.

The Spergel Comprehensive Community-wide Gang Program Model aims to combine prevention, intervention and suppression activities. The model calls for a steering committee in each site composed of public and private agency administrators (i.e. police, prosecutors, schools, social service agencies, indigenous community groups, etc.) with a central lead agency to administer the funds and coordinate the programme components. This model incorporates five strategies:

1. Community mobilization: developing and maintaining an interacting set of public and private agencies, groups and residents to organize a comprehensive programme responsive to the local gang problem
2. Social intervention: street workers developing outreach contacts with gang members and those at higher risk of gang membership to counsel targeted youth and provide liaison with schools, social services and criminal justice agencies
3. Opportunities provision: developing access for gang members to employment, job training, educational and cultural opportunities as alternatives to gang activity
4. Organizational change and development: bringing about changes in the policies and practices of public and private agencies to help them be more responsive to the needs of gang youth and increase interagency collaboration

5. Suppression: the use of police, probation, parole and the courts to hold youth accountable for their criminal activities, including special anti-gang practices, police gang units, gang court injunctions, and specialized gang intelligence

| Sample programmes and effect | Relevant studies |
|---|---|
| Little Village Project (Chicago, IL), Spergel Comprehensive Community-wide Gang Program Model (Mesa, Riverside, Bloomington/Normal, San Antonio, Tucson), Project Safe Neighbourhoods (Chicago, IL), Operation Ceasefire (Chicago, IL)<br><br>While there is currently insufficient evidence to justify a policy recommendation to use (or not use) 'comprehensive' interventions, the few high-/medium-quality studies evaluating these interventions suggest that promising comprehensive approaches include one or more of the following components:<br><br>» A case management/holistic personalized approach<br>» Community involvement in planning and delivery of interventions<br>» Sharing of expertise between agencies<br>» Incentives to change offending behaviour.<br><br>There was modest evidence, based on five evaluations of comprehensive approaches, of mixed effects on outcomes of criminality.<br><br>The Little Village Project, Chicago IL (Prototype), Spergel Model (Mesa, Riverside, Bloomington/Normal, San Antonio, Tucson).<br><br>Programme effects across the five intervention sites were mixed and the authors conclude that this approach is promising, with inconsistent effects. Based on process evaluation data, the authors suggest that the lack of effect in unsuccessful sites was partly explained by poor implementation fidelity. For example, in the five evaluation sites, they experienced difficulty in gaining the cooperation and partnership of the various agencies required for effective community mobilization and interagency partnership working. This was at least in part due to divergent political and organizational interests that often made collaboration between agencies difficult. There were uneven performances by the local evaluation teams. There were issues with the acceptability of outreach workers to the communities and with the night-time and weekend hours required for outreach workers to effectively engage targeted youth. Data systems were insufficient to facilitate ongoing monitoring and sharing of information. Lastly, the model was not articulated with sufficient detail and guidance to enable implementation fidelity across sites. | Hodgkinson *et al*. (2009)<br><br>Wong *et al*. (2012)<br><br>Huey *et al*. (2016)<br>See also Klein and Maxson (2006) |

# Holistic gang control approaches

## Intervention model: Holistic interventions

**Programme description:** Holistic interventions were defined by Wong *et al.* (2012) as those interventions that include at least four strategies, including one from each of prevention, gang activity regulation, and justice system-based intervention. This ensures that all three levels of intervention are included. The programme must include two of the three following strategies: preventive awareness, gang membership prevention, or gang activity prevention. This ensures that real efforts are made in a community to address the gang problem before youths enter the criminal justice system. Strategies must be overseen by the same organization or be in close contact with organizations that are in charge of each strategy.

| Sample programmes and effect | Relevant studies |
|---|---|
| Gang Reduction Project (Los Angeles, Milwaukee, North Miami Beach, Richmond)<br><br>There is modest evidence, based on four quasi-experimental studies (pre-test, post-test with non-equivalent comparison group), of a mixed impact on reducing gang-related crime. There was variation in implementation of the programme in the four sites, which may partly explain the mixed findings. There were no significant treatment effects found in two sites. In a third site, there was a significant decrease in the target area for shots fired and gang-related crime alongside no concurrent significant decrease in the comparison area. In the last site, there was no significant change in drug-related incidents, but a concurrent significant increase in the comparison area. | Wong *et al.* (2012) |

# Gang membership prevention

## Intervention model: Community engagement

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV[4] | | | INT | SUP | COMP |
| | U | S | I | | | |
| O'Connor and Waddell (2015) | | ✓ | ✓ | | | |

### What relevant outcomes were evaluated?[4]

Identify those with the greatest need and supporting gang and violence prevention efforts

### What effect, if any?

It was not possible to identify any robust evaluations of specific community-based programmes to provide an indication of their effectiveness. This evidence gap has been noted in other reviews.

4 PREV: Prevention; INT: Intervention; SUP: Suppression; COMP: Comprehensive; U: Universal; S: Selective; I: Indicated

## Intervention model: Parent and child skills-based programmes

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| O'Connor and Waddell (2015) | ✓ | | | | | |

### What relevant outcomes were evaluated?

Effects on outcomes such as: violent, criminal, and antisocial behaviour, dating violence and abuse, delinquency, conduct problems, fighting, aggression, substance initiation and use, sexual behaviours, problem-solving, and empathy.

### What effect, if any?

Collectively, programmes that worked had positive effects on outcomes such as: violent, criminal, and antisocial behaviour, dating violence and abuse, delinquency, conduct problems, fighting, aggression, substance initiation and use, sexual behaviours, problem-solving, and empathy.

## Intervention model: Drug Abuse Resistance Education (DARE) and Gang Resistance Education And Training Programme (GREAT) I

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| NCPC (2007) | ✓ | | | | | |

### What relevant outcomes were evaluated?

Prevent drug use, delinquency and gang initiation

### What effect, if any?

Reasons for failure of the GREAT programme: police officers delivered the programme; attitudinal variables or life skills trigger the attractiveness of gang membership; the content of the curriculum failed to incorporate the existing knowledge about gangs and it was not targeted at those most at risk of joining gangs.

## Intervention model: GREAT – Version II one-year and four-year evaluation

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | $PREV_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Wong (2012)<br>Esbensen (2013) | ✓ | | | | | |

### What relevant outcomes were evaluated?

Gang membership

### What effect, if any?

Significant treatment effect found was for lower rates of gang membership.

## Intervention model: Parent skills-based programmes for at-risk children aged 0–3 years

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | $PREV_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| O'Connor and Waddell (2015)<br>Farrington and Welsh (2003)<br>NCPC (2007)<br>Piquero (2008) | | ✓ | | | | |

### What relevant outcomes were evaluated?

Child behaviour
Parenting practices
Antisocial behaviour
Delinquency
Crime

### What effect, if any?

Overall, there is good evidence to suggest that interventions which develop parenting skills, which support families, and which strengthen relationships between children and their parents/carers can have immediate impacts on child behaviour and parenting practices. However, research on long-term outcomes, such as young people's risk of involvement in future antisocial behaviour, delinquency, and crime, is more limited.

Farrington and Welsh (2003) calculated effect sizes for delinquency outcomes when the targets were adolescents or adults, as described in two studies (Olds *et al.*, 1998; Reynolds et al., 2001). The intervention was based on nurse visiting or nursery-based parent training while the target child was aged 0–3 years.

Data on long-term outcomes were not included in the meta-analysis. They found a long-term effect size of 0.54 for arrests for Olds *et al.* (1998), and 0.28 for the same outcome for Reynolds *et al*. (2001).

Results of the Piquero *et al*. review indicate that early family/parent training is an effective intervention for reducing short-term behavioural problems among young at-risk children and the weighted effect size was 0.35, approximately corresponding to 50% recidivism in the control group compared with 33% recidivism in the experimental group. The results demonstrated that there were significant differences in the effect sizes of studies conducted in the US versus those conducted in other countries and that studies that were based on samples smaller than 100 children had larger effect sizes. Sample size was also the strongest predictor of the variation in the effect sizes. Piquero *et al.* completed a narrative analysis of the long-term delinquency outcomes and concluded that, overall, family and parent training for at-risk parents reduced their children's level of delinquency in adolescence and crime in adulthood. Most studies demonstrated an improvement in behaviour.

### Intervention model: Parent and/or child skills-based programmes targeting at-risk children tended to be school based and/or family focused. Occasionally they are family and community focused.

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | $PREV_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| O'Connor and Waddell (2015) | | ✓ | | | | |
| Piquero (2008) | | | | | | |
| Piquero (2010) | | | | | | |
| Fisher *et al*. (2008) | | | | | | |

#### What relevant outcomes were evaluated?

Child behavioural problems
Delinquency (long term)
Delinquency and problem behaviours up to the age of 10
Gang membership

#### What effect, if any?

Overall, there is a strong argument that the most effective and well-evidenced approaches tend to have 'therapeutic' principles, meaning they aim to create positive changes in the lives of young people and/or their families, as well as prevent negative outcomes. This includes, for example, skills-based, parent-/family-focused, and therapy-based programmes. Overall, skills-based interventions had a statistically significant, small- to medium-sized effect in reducing child behavioural problems. This was true for both home visiting and parent training programmes, which had similar effects on child behaviour. These effects were significantly larger for studies conducted in the US compared to those conducted in other countries, such as the UK, Australia, and Canada.

Results of the Piquero *et al*. review indicate that early family/parent training is an effective intervention for reducing short-term behavioural problems among young children and the weighted effect size was 0.35, approximately corresponding to 50% recidivism in the control group compared with 33% recidivism in the experimental group. The results demonstrated that there were significant differences in the effect sizes of studies conducted in the US versus those conducted in other countries and that studies that were based on samples smaller than 100 children had larger effect sizes. Sample size was also the strongest predictor of the variation in the effect sizes. Piquero *et al*. completed a narrative analysis of the long-term delinquency outcomes and concluded that, overall, family and parent training for at-risk parents reduced their children's level of delinquency in adolescence and crime in adulthood. Most studies demonstrated an improvement in behaviour.

The studies included in this systematic review indicate that self-control improvement programmes are an effective intervention for improving self-control and reducing delinquency and problem behaviours up to the age of 10 (considered short-term effects), and that the effect of these programmes appears to be robust across various weighting procedures, and across context, outcome source, and based on both published and unpublished data.

The authors conclude that self-control improvement programmes should continue to be used to improve self-control and reduce delinquency and behavioural problems up to age 10, which is the age cut-off where Gottfredson and Hirschi argue that self-control becomes relatively fixed and no longer malleable.

No evidence from randomized controlled trials or quasi-experimental studies exists (as of 2008) regarding the effectiveness of cognitive behavioural interventions for gang prevention.

## Intervention model: Mentoring (youth mentoring)

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | $PREV_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| DuBois *et al*. (2011)<br>O'Connor and Waddell (2015) | | ✓ | | | | |

### What relevant outcomes were evaluated?

Recidivism
Conduct behaviour

### What effect, if any?

While initial evidence suggests that mentoring can have beneficial effects, programmes can vary substantially and, on the whole, our knowledge about 'what works' is limited and predominantly from the US. Looking at high-risk youth, Lipsey's (2009) meta-analytic overview of studies with control groups found that mentoring interventions for young offenders were associated with a 21% reduction in recidivism. In a rapid evidence assessment of the effects of mentoring for individuals at risk of offending or apprehended by the police, mentoring was associated with a 4–11% reduction in subsequent offending (Jolliffe and Farrington, 2007). For children and young people more generally, one systematic review and meta-analysis of randomized and quasi-experimental designs with control/comparison groups found mentoring to have small positive effects across behavioural, social, emotional, and academic domains (DuBois *et al.*, 2011). Mentoring has a small but positive effect on conduct problems (0.21, 0.11–0.31). Several other aspects of DuBois' findings, however, underscore a need for caution. These include a failure of evaluations to assess several key outcomes of policy interest (e.g., juvenile offending, obesity prevention) or to determine whether benefits for youth are sustained at later points in their development.

## Intervention model: Education and employment opportunities provision

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | $PREV_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Fisher *et al.* (2008b) | | ✓ | | | | |

### What relevant outcomes were evaluated?

Gang membership

### What effect, if any?

No evidence from randomized controlled trials or quasi-experimental studies currently exists regarding the effectiveness of opportunities provision for gang prevention. Rigorous primary evaluations of gang prevention strategies are crucial to develop this research field, justify funding of existing interventions, and guide future gang prevention programmes and policies.

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | $PREV_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Abt and Winship (2016) | | | ✓ | | | |

### What relevant outcomes were evaluated?

Recidivism

### What effect, if any?

There is mixed evidence, based on two reviews (Visher *et al*. (2005); Aos *et al*. (2006)), of a modest impact of vocational training on the prevention of recidivism.

## Intervention model: Sports programmes

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| O'Connor and Waddell (2015) | | ✓ | | | | |

### What relevant outcomes were evaluated?

Crime

### What effect, if any?

While there is initial evidence to suggest that these programmes may reduce youth crime and violence, this largely comes from studies using weak evaluation designs. The evidence is interesting as a broad and preliminary indication of possible effectiveness, but because most of the studies had small sample sizes and lacked control groups, it is difficult to determine whether these sports-based programmes genuinely caused the outcomes measured, and so the findings should not be overstated.

## Intervention model: Harmful or ineffective prevention strategies: Deterrence and discipline

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| O'Connor and Waddell (2015)<br>Petrosino *et al.* (2013)<br>Wilson *et al*. (2005) | | ✓ | | | | |

### What relevant outcomes were evaluated?

Delinquency
Offending

### What effect, if any?

Robust reviews and studies have shown that approaches to preventing youth crime and violence based on deterrence and/or discipline are ineffective and may even make things worse, particularly for young people who are at risk or already involved in delinquency and offending.

Petrosino and colleagues conclude that programmes such as 'Scared Straight' are likely to have a harmful effect and increase delinquency among youths relative to doing nothing at all. Given these results, we cannot recommend this programme as a crime prevention strategy.

The current evidence suggests that this common and defining feature of a boot camp is not effective in reducing post-boot-camp offending.

## Intervention model: Deterrence programmes

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Lipsey (2009) | | | | ✓ | ✓ | |

### What relevant outcomes were evaluated?

Recidivism (court contact/conviction, incarceration/institutionalization, arrests, self-report delinquency, probation violations).

### What effect, if any?

Deterrence programmes show harmful effects – that is, the intervention groups have higher recidivism rates than the control groups.

## Intervention model: Disciplinary interventions

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Lipsey (2009) | | | ✓ | | | |

### What relevant outcomes were evaluated?

Recidivism (court contact/conviction, incarceration/institutionalization, arrests, self-report delinquency, probation violations).

### What effect, if any?

Disciplinary interventions show harmful effects – that is, the intervention groups have higher recidivism rates than the control groups.

## Intervention model: Family-focused programme for high-risk children and young people and their parents or guardians

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Littell *et al*. (2005)<br>Fisher *et al*. (2008a)<br>NCPC (2007)<br>O'Connor and Waddell (2015) | | | ✓ | | | |

### What relevant outcomes were evaluated?

Arrests and/or convictions for criminal offences
Incarceration
Behavioural
Psychosocial
Family (out-of-home placements)
Gang membership

### What effect, if any?

Outcome measures included archival data (police and court records) on arrests and/or convictions for criminal offences and incarceration in studies of juvenile offenders in the US and Canada. Measures of behavioural, psychosocial, and family outcomes were examined. Behavioural outcomes included antisocial behaviour (as measured by arrest or conviction of a criminal offence), drug use (self-reports and drug tests), and school attendance.
The most rigorous (intent-to-treat) analysis found no significant differences between MST and usual services in restrictive out-of-home placements and arrests or convictions. Pooled results that include studies with data of varying quality tend to favour MST, but these relative effects are not significantly different from zero. The study sample size is small and effects are not consistent across studies; therefore, it is not clear whether MST has clinically significant advantages over other services.

No evidence from randomized controlled trials or quasi-experimental studies exists (as of 2008) regarding the effectiveness of cognitive behavioural interventions for gang prevention.

The authors classify Multisystemic Therapy as an example of best practice to prevent or reduce delinquency measured by reductions in levels of re-arrest and out-of-home placements. They also say that evidence for family functioning and mental health outcomes is promising.

Overall, there is a strong argument that the most effective and well-evidenced approaches tend to have 'therapeutic' principles, meaning they aim to create positive changes in the lives of young people and/or their families, as well as prevent negative outcomes. This includes, for example, skills-based, parent-/family-focused, and therapy-based programmes. Multisystemic Therapy and parent training (compared to no intervention) are the more effective methods for healing with high-risk children. The least effective were school-based approaches, which failed to have a statistically significant impact.

## Intervention model: Counselling

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Lipsey (2009) | | | ✓ | | | |

### What relevant outcomes were evaluated?

Recidivism (court contact/conviction, incarceration/institutionalization, arrests, self-report delinquency, probation violations).

### What effect, if any?

Counselling reduces recidivism by 13% from a mean control group recidivism rate of 0.50. Interventions applied to juveniles with higher levels of delinquency risk were more effective. Interventions that were implemented with high quality were more effective.

## Intervention model: Skill-building programmes

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Lipsey (2009) | | | ✓ | | | |

### What relevant outcomes were evaluated?

Recidivism (court contact/conviction, incarceration/institutionalization, arrests, self-report delinquency, probation violations).

### What effect, if any?

Skill-building programmes reduce recidivism by 12% from a mean control group recidivism rate of 0.50. Interventions applied to juveniles with higher levels of delinquency risk were more effective. Interventions that were implemented with high quality were more effective.

## Intervention model: Multiple coordinated services

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Lipsey (2009) | | | ✓ | | | |

### What relevant outcomes were evaluated?

Recidivism (court contact/conviction, incarceration/institutionalization, arrests, self-report delinquency, probation violations).

### What effect, if any?

Multiple coordinated services reduce recidivism by 12% from a mean control group recidivism rate of 0.50. Interventions applied to juveniles with higher levels of delinquency risk were more effective. Interventions that were implemented with high quality were more effective.

## Intervention model: Gang-specific prevention approaches

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Wong *et al.* (2012)<br>NCPC (2007)<br>Smith-Moncrieffe (2013)<br>O'Connor and Waddell (2015) | | | ✓ | | | |

### What relevant outcomes were evaluated?

Delinquency
Gang membership
Arrests
Behavioural symptoms
Thought problems
Delinquency
Police contact
Offending
Conduct problems
Victimization
Gang exit

### What effect, if any?

In Wong *et al.*, none of the assessments of single treatment (targeted prevention) programme effects on delinquency outcomes demonstrated a significant reduction in gang-joining behaviours. Across the five gang membership prevention programme evaluations, no significant treatment effects were found for gang membership or arrests. The only other significant effect seen across the gang membership prevention programmes was a lower rate of gang involvement found in the evaluation of the Logan Square Prevention (LSP) project a comprehensive programme (LSP; Godley *et al.,* 1998). The LSP project involved a coalition of agencies providing school- and community-based prevention services to youths with a focus on reducing substance use and gang involvement.

To date, there have been several studies that have been conducted which support Wraparound's effectiveness. For example, two randomized clinical trials, conducted in New York and Florida, showed favourable results for children and youth participating in the wraparound process. There were, for example, decreases in behavioural symptoms, thought problems, and rates of delinquency.

Six of the 10 evaluations in Canada measured behavioural outcomes. Four of these six studies (67%) reported results that indicate positive change in at least one behavioural outcome. Behaviours assessed include police contact, violent and non-violent offending and gang involvement. Gang involvement, police contact and non-violent offending behaviour such as theft and selling illegal drugs were the most likely outcomes to be reduced. Violent offending was less likely to be reduced as most youths in these gang prevention projects did not have a violent offending history.

*Gang Prevention Strategy* (violent offending): There was a statistically significant reduction (22%) in the youth committing physical assaults by the end of the programme.

*Youth Advocate Programme*: By the end of the programme the youth showed a decrease in delinquency and conduct problems. Reductions in victimization were significant, with a moderate effect size (0.55). Surrey Wraparound (police contact): Results show a significant decline (67%) in police contacts relative to the comparison group.

Gang exit (also known as the gang membership variable) was a key measure in the YGPF projects. Most of the projects targeted both youth at risk of gang involvement and gang-involved youth. The gang exit findings suggest that for the four projects that were able to measure the gang exit rate at the end of the programme, 41–67% of the youth were no longer gang involved by the end of the project. In some projects the evaluators were able to measure the gang exit rate beyond the post-programme period. The RAGS project had 100% of its participants involved in gangs and by the final follow-up stage (approximately 12 months post-programme) had 71% of its participants exit their respective gangs. Similarly, evaluators found that 100% of the youth in the YAAGV project had exited their respective gangs by the final follow-up measure (approximately 12 months post-programme).

While there are a range of strategies and interventions being used to try and prevent young people from becoming involved in gangs and to help them find ways out if they do become involved, there is a lack of robust, high-quality evidence on whether these approaches work.

# Gang activity prevention

## Intervention model: Gang activity prevention

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Wong *et al.* (2012) | | | | ✓ | | |

### What relevant outcomes were evaluated?

Gang-related crime
Gang-related violence
Property crimes
Violent crimes
Drug crimes

### What effect, if any?

Most of the outcomes assessed by the seven studies evaluating gang activity prevention interventions identified by this review showed no significant impact; however, there were a few promising findings. The study by Fritsch *et al*. (1999) of the Dallas Anti-Gang Initiative reported mixed findings with significant reductions in gang-related violence in some control and some target areas. The evaluation of Operation Cul-de-sac (implementation of street barriers) by Lasley *et al.* (1998) found that the number of violent crimes fell significantly during the programme and rose after the programme ended. Spergel *et al*. (1986) evaluated a gang conflict mediation programme – Crisis Intervention Services Project (CRISP) — and found that rates of increase in violent gang crimes and property crimes were significantly lower in the target versus comparison areas.

## Intervention model: Urban renewal

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Abt and Winship (2016) | | | | ✓ | | |

### What relevant outcomes were evaluated?

Crime
Violence

### What effect, if any?

There is modest evidence, based on a review of five studies with only one randomized controlled trial, of a modest impact on the prevention of crime and violence. This review concluded that urban renewal was associated with reduced crime and improved police legitimacy and collective efficacy; however, the number and quality of studies supporting this finding was limited.

## Intervention model: Crime prevention through environmental design

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Abt and Winship (2016) | | | | ✓ | | |

### What relevant outcomes were evaluated?

Crime
Violence

### What effect, if any?

There is moderate evidence, based on three reviews, of only modest, if any, impact on crime and violence. An unintended consequence of this approach that was observed is that it can undermine collective efficacy by encouraging residents to withdraw behind walls, fences, and fortified homes.

## Intervention model: Neighbourhood watch

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Abt and Winship (2016) | | | | ✓ | | |

### What relevant outcomes were evaluated?

Crime
Violence

### What effect, if any?

There is modest evidence, based on one review, of a modest impact on crime and violence.

## Gang alternatives

### Intervention model: Gang alternatives

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Wong *et al*. (2012) | ✓ | | ✓ | ✓ | ✓ | ✓ |

#### What relevant outcomes were evaluated?

Gang-related crime or violence
Gang membership

#### What effect, if any?

Wong *et al*. (2012) identified five evaluations which they classified as gang alternatives, including: Gang Intervention Through Targeted Outreach (GITTO), San Diego Street Youth Programme, Gang Employment Programme, Aggression Replacement Training, and the San Antonio Gang Rehabilitation, Assessment and Support Programme. There was limited evidence suggesting no discernible effect for any of these interventions.

## Gang activity suppression

### Intervention model: 'Pulling levers' focused deterrence

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Braga and Weisburd (2012). Also in Abt and Winship (2016) | | | | | ✓ | |

#### What relevant outcomes were evaluated?

Crime and violence

#### What effect, if any?

'Pulling levers' focused deterrence strategies are associated with an overall statistically significant, medium-sized crime reduction effect.

This intervention approach has the largest direct impact on crime and violence of any suppression intervention reviewed by Abt and Winship (2016).

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Campie *et al.* (2013) | | | | | ✓ | |

### What relevant outcomes were evaluated?

Serious violence

### What effect, if any?

Ten out of the 11 evaluations showed that specific targeting of high-risk gang members resulted in substantial reductions in outcomes, including homicides, non-fatal shootings and reports of shooting.

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Corsaro and Engel (2015) | | | | | ✓ | |

### What relevant outcomes were evaluated?

Crime and violence

### What effect, if any?

A statistically significant reduction above and beyond changes observed in comparable lethally violent cities was observed. The greatest changes in targeted outcomes were observed in gang homicides, young black male homicides, and gun violence. The decline in targeted violence corresponded with the implementation of the 'pulling levers' notification meetings. This evidence suggests that focused deterrence is a promising violence prevention approach in urban contexts with persistent histories of lethal violence, heightened disadvantage, and undermined police.

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Papachristos and Kirk (2015) | | | | | ✓ | |

### What relevant outcomes were evaluated?

Involvement in shootings, offending, and victimization

### What effect, if any?

Authors found a 23% reduction in shootings after attending a call-in, suggesting that if at least one faction member attended a call-in, that faction would be involved in 23% fewer shootings in the following year. In addition, representation at a call-in led to a 32% reduction in fatal or non-fatal victimization in the following year. Given incomplete data on offending patterns, it can only be concluded that treatment factions are no more likely than control factions to be perpetrators of shootings and may in fact be less likely.

## Intervention model: Hot spots policing

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Abt and Winship (2016) | | | | | ✓ | |

### What relevant outcomes were evaluated?

Crime and violence

### What effect, if any?

There is strong evidence, based on a systematic review of 19 evaluations, including 10 randomized controlled trials, that hot spots policing approaches have a modest impact on suppressing crime and violence, with results ranging from no difference to a 33% reduction. Focusing police efforts on micro-locations yields positive benefits. Evidence suggests that crime is not displaced when hot spots are targeted; rather, crime and violence is likely to decrease for those living near or adjacent to hot spots enforcement.

## Intervention model: Disorder (broken window) policing

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Abt and Winship (2016) | | | | | ✓ | |

### What relevant outcomes were evaluated?

Crime and violence

### What effect, if any?

There is strong evidence, based on a systematic review of 28 evaluations, including nine randomized controlled trials, that disorder policing has a modest impact on suppressing crime and violence. Evidence suggests that certain approaches work better than others, with community- and problem-oriented policing approaches preferred over aggressive zero tolerance strategies which can create community tension and undermine collective efficacy.

## Intervention model: Community policing

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Abt and Winship (2016) | | | | | ✓ | |

### What relevant outcomes were evaluated?

Crime and violence

### What effect, if any?

There is moderate evidence, based on a systematic review of 25 studies, including only one randomized controlled trial, that community-oriented policing has no discernible impact on the suppression of crime and violence, although it did positively affect citizen satisfaction, perceptions of disorder and police legitimacy.

## Intervention model: Problem-oriented policing

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Abt and Winship (2016) | | | | | ✓ | |

### What relevant outcomes were evaluated?

Crime and violence

### What effect, if any?

There is moderate evidence, based on a review of evaluations, including no randomized controlled trials, of a modest impact on the suppression of crime and violence. Problem-oriented policing strategies appear to improve the performance of other policing strategies, such as hot spots, disorder, and community-oriented policing.

## Intervention model: Gun enforcement

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Abt and Winship (2016) | | | | | ✓ | |

### What relevant outcomes were evaluated?

Crime and violence

### What effect, if any?

There is moderate evidence of a moderate impact on suppressing crime and violence.

## Intervention model: Comprehensive gun violence reduction

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Abt and Winship (2016) | | | | | ✓ | |

### What relevant outcomes were evaluated?

Crime and violence

### What effect, if any?

There is moderate evidence of a strong impact on suppressing crime and violence.

## Intervention model: Drug enforcement

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Abt and Winship (2016) | | | | | ✓ | |

### What relevant outcomes were evaluated?

Crime and violence

### What effect, if any?

There is moderate evidence of a negative impact on violence. Drug enforcement appears to have a limited impact and may actually increase violence by destabilizing drug markets and increasing violence among drug sellers.

# Corrections-based gang interventions (not prison)

## Intervention model: Drug courts and treatment

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Abt and Winship (2016) | | | | ✓ | | |

### What relevant outcomes were evaluated?

Recidivism

### What effect, if any?

There is strong evidence, based on four reviews which reinforce the well-established finding, that drug treatment and drug courts can significantly reduce recidivism.

## Intervention model: Aftercare programmes

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| James *et al*. (2011) | | | | ✓ | | |

### What relevant outcomes were evaluated?

Recidivism (re-arrests, re-convictions)

### What effect, if any?

There is moderate evidence, based on a review of 22 randomized controlled or quasi-experimental evaluation studies, of a modest positive but significant impact on reducing recidivism compared to usual or no treatment among youthful offenders. The effects are short term and highly dependent on the quality of intervention implementation. Aftercare seems to have a greater effect when it is individualized and with high-risk populations, such as gang-involved youth.

## Intervention model: Surveillance

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Lipsey (2009) | | | | | ✓ | |

### What relevant outcomes were evaluated?

Recidivism (court contact/conviction, incarceration/institutionalization, arrests, self-report delinquency, probation violations).

### What effect, if any?

Surveillance reduces recidivism by 6% from a mean control group recidivism rate of 0.50.

## Intervention model: Risk/needs/responsivity framework

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Abt and Winship (2016) | | | | ✓ | | |

### What relevant outcomes were evaluated?

Recidivism

### What effect, if any?

There is strong evidence, based on five reviews, that this approach has a strong impact on preventing recidivism among violent or non-violent, adult or juvenile offenders. This approach works in both community and institutional settings and is particularly effective when CBT is incorporated.

## Intervention model: Restorative justice conferencing

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Lipsey (2009) | | | | ✓ | | |

### What relevant outcomes were evaluated?

Recidivism (court contact/conviction, incarceration/institutionalization, arrests, self-report delinquency, probation violations).

### What effect, if any?

Restorative programmes reduce recidivism by 10% from a mean control group recidivism rate of 0.50. Interventions applied to juveniles with higher levels of delinquency risk were more effective. Interventions that were implemented with high quality were more effective.

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Livingstone *et al*. (2013) | | | | | ✓ | |

### What relevant outcomes were evaluated?

Reoffending (re-arrests, monthly rate of offending, offenders' remorse, or offenders' recognition of wrongdoing).

### What effect, if any?

There is moderate evidence, based on four randomized controlled trials, of no discernible effect of restorative justice conferencing over normal court proceedings for number re-arrested, monthly rate of offending, offenders' remorse, or offenders' recognition of wrongdoing.

# Comprehensive gang control approaches

## Intervention model: 'Comprehensive' interventions

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Hodgkinson *et al.* (2009) | | | ✓ | ✓ | ✓ | ✓ |

### What relevant outcomes were evaluated?

Outcomes clustered into three broad groupings: reduction in gang-related crime, change in subject behaviour, and change in attitudes of the community. Key crime outcome measures included: recidivism, custodial sentences, homicide victims, drive-by shootings, gang crime in a specified area, violent crime, calls for police for shots fired, gun assaults, offences committed by gangs, arrests, court appearances, property offences, drug-related crime, gang loitering, disorderly conduct and mob action, and self-reported delinquency.

### What effect, if any?

The primary outcome of the review was a reduction in crime. Of the 12 studies which measured crime reduction outcomes, seven (58.3%) were affirmative, four (33.3%) were inconclusive, and one (8.3%) was negative. The authors conclude that there are potentially positive effects of 'comprehensive' interventions, but with only limited evidence of support. 'Comprehensive' interventions may be more effective than non-'comprehensive' interventions. The high-/medium-quality studies with a significant positive pooled effect size included one or more of the following elements:

» A case management/holistic personalized approach
» Community involvement in planning and delivery of interventions
» Sharing of expertise between agencies
» Incentives to change offending behaviour.

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Huey *et al.* (2016) | | | ✓ | ✓ | ✓ | ✓ |

### What relevant outcomes were evaluated?

Antisocial behaviour and gang involvement

### What effect, if any?

Programme effects across the five intervention sites were mixed and the authors conclude that this approach is promising, with inconsistent effects. Based on process evaluation data, the authors suggest that the lack of effect in unsuccessful sites was partly explained by poor implementation fidelity.

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Wong *et al*. (2012) | ✓ | | ✓ | ✓ | ✓ | ✓ |

### What effect, if any?

There was modest evidence, based on five evaluations of comprehensive approaches, of mixed effects on outcomes of criminality.

## Holistic gang control approaches

### Intervention model: Holistic interventions

| Study (author/year) | Areas addressed | | | | | |
|---|---|---|---|---|---|---|
| | PREV$_4$ | | | INT | SUP | COMP |
| | U | S | I | | | |
| Wong *et al*. (2012) | ✓ | | ✓ | ✓ | ✓ | ✓ |

### What relevant outcomes were evaluated?

Gang-related crime, gang-related violence, property crimes, violent crimes, drug crimes

### What effect, if any?

There is modest evidence, based on four quasi-experimental studies (pre-test, post-test with non-equivalent comparison group) of a mixed impact on reducing gang-related crime. There was variation in implementation of the programme in the four sites, which may partly explain the mixed findings. There were no significant treatment effects found in two sites. In a third site, there was a significant decrease in the target area for shots fired and gang-related crime alongside no concurrent significant decrease in the comparison area. In the last site, there was no significant change in drug-related incidents, but a concurrent significant increase in the comparison area.

## Study (author, year): Abt and Winship (2016)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Meta-review or review of reviews<br><br>(complemented by field study) | Summarize and analyse evidence to determine what works in reducing community violence | 43 systematic reviews reporting only on studies using experimental or quasi-experimental research design published between 1990 and 2015 in English and Spanish | The Americas or Europe | | |

### Summary of key findings

Place/people/behaviour framework used to group findings. Place-based approaches: hot spots and disorder policing strategies and neighbourhood watch programmes have strong evidence of modest effects. Community policing strategies have no discernible impact on crime and violence.

People-based approaches: problem-oriented policing (using SARA – scanning, analysis, response, and assessment approach) had a modest impact on crime and violence, but appears to improve other policing strategies.

Focused deterrence has the largest direct impact on crime and violence (based on Braga, 2011) of all people-based approaches. There is strong evidence that cognitive behavioural therapy significantly reduces recidivism. There is also strong evidence that other recidivism interventions that employ a risk/needs/responsivity framework have a strong impact and these programmes work in a community setting. Mentoring only appears to be successful when it is one of several interventions used. Family-based anti-violence interventions, often including CBT, appear to be effective in reducing violence. Aftercare programmes, electronic monitoring and surveillance/discipline strategies are ineffective in reducing recidivism.

Behaviour-based approaches: only focused deterrence and drugs courts and treatment were shown to have a strong level of effectiveness.

## Study (author, year): Braga and Weisburd (2012)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Systematic review with meta-analysis using randomized or quasi-randomized control trials | To estimate the overall impact of focused deterrence strategies on crime | 10 studies examining focused deterrence interventions in US cities released after 2000. All of the studies were RCTs or a quasi-experimental evaluation with comparison groups | US | Health evidence check | Moderate<br><br>No quality assessment of primary studies |

### Summary of key findings

The 'pulling levers' focused deterrence strategies are associated with an overall statistically significant, medium-sized crime reduction effect. The approach appears to alter offenders' perceptions of sanctions risk and suggests that police can be effective in controlling specific crime problems when they engage with a range of partners and use a range of tactics to address underlying criminogenic conditions and dynamics. Of the 10 evaluations studied, nine reported noteworthy crime reduction effects. Outcomes were: gun assaults; total homicides; gun homicides; gang-member-involved homicides; gunshot wounds; and combined outcomes. The meta-analysis of effect sizes suggests a strongly significant effect (0.604) in favour of focused deterrence strategies. The differences in effect size between various studies are partially explained by differing applications of the focused deterrence strategy. The effects observed in some of the studies were often very large and the review provides strong empirical evidence for the crime prevention effectiveness of focused deterrence strategies.

## Study (author, year): Campie *et al.* (2013)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Rapid evidence assessment | Identify effective programmes designed to reduce serious violence among targeted groups of young offenders | 11 programme evaluations | US | Health evidence check | Strong |

### Summary of key findings

Review included evaluations of: Operation Ceasefire; Project Safe Neighbourhoods; Operation Peacekeeper; Pittsburgh One Vision; Baltimore Safe Streets; and Save our Streets. Ten out of the 11 evaluations showed that specific targeting of high-risk gang members resulted in substantial reductions in outcomes, including homicides, non-fatal shootings and reports of shooting. Although the REA does not target a specific programme, the evaluations had to be of programmes with multiple components, not solely a police strategy, and ones that target serious violence. A common theme in the evaluations is a focus on youth at greatest risk for serious violence, not the entire gang problem.

### Study (author, year): Corsaro and Engel (2015)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Quasi-experimental design | Determine if a focused deterrence strategy resulted in reduction in number of homicides | The programme communicated directly with 164 individuals (representing 54 gangs) | New Orleans, US | MMAT | Strong (100%) |

#### Summary of key findings

The study evaluated the implementation of a focused deterrence strategy called the Group Violence Reduction Strategy in New Orleans – a high homicide setting. Overall, homicides declined by between 17% and 31% when compared with similar cities. Targeted gang members and groups were involved in considerably fewer violent incidents (offenders and victims) and less overall crime, compared to those who did not receive call-in sessions. The Outreach Workers had no additional benefit to the focused deterrence strategy. Group Violence Reduction Strategy (GVRS) received a high level of support from policy and city government.

### Study (author, year): DuBois *et al.* (2011)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Systematic review with meta-analysis using randomized or quasi-randomized control trials | Effectiveness of mentoring programmes for youth and the conditions required for such programmes to achieve optimal positive outcomes for participating youth | The meta-analysis included 73 studies with 83 samples | The large number of mentoring programmes currently in the US stems, in part, from longstanding public and governmental concern over the negative outcomes experienced by significant proportions of youth in this country, especially those growing up under conditions of disadvantage | Health evidence check | Moderate (7)<br><br>Search strategy unclear and no quality assessment of primary studies |

#### Summary of key findings

Overall, findings support the effectiveness of mentoring for improving outcomes across behavioural, social, emotional, and academic domains of young people's development. The most common pattern of benefits is for mentored youth to exhibit positive gains on outcome measures while non-mentored youth exhibit declines. It appears then that mentoring as an intervention strategy has the capacity to serve both promotion and prevention aims. Programmes also show evidence of being able to affect multiple domains of youth functioning simultaneously and to improve selected outcomes of policy interest. From

a developmental standpoint, benefits of participation in mentoring programmes are apparent from early childhood to adolescence and thus not confined to a particular stage of development. Similarly, although programmes typically have utilized adult volunteers and focused on cultivating one-to-one relationships, those that have engaged older peers as mentors or used group formats show comparable levels of effectiveness. Collectively, these findings point towards the flexibility and broad applicability of mentoring as an approach for supporting positive youth development.

Several other aspects of our findings, however, underscore a need for caution. These include a failure of evaluations to assess several key outcomes of policy interest (e.g., juvenile offending, obesity prevention) or to determine whether benefits for youth are sustained at later points in their development. Mentoring has a small but positive effect on conduct problems (0.21, 0.11–0.31).

### Study (author, year): Esbensen *et al.* (2013)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Randomized control trial | Effect of Gang Resistance Education And Training (GREAT) program II on gang membership and social attitudes at five years | 3,820 students enrolled in 195 classrooms in 31 schools in seven cities in the US were surveyed six times over five years. Pre-tests and post-tests in Year 1 and four annual follow-up surveys | US | PRISM RCT criteria | Moderate (8/11)<br><br>Method for calculating sample size not provided. Approaches to blinding and intention to treat analysis not clear. |

#### Summary of key findings

The results indicate that during the four years post-treatment, students who received the programme had lower odds of gang membership compared with the control group. The treatment group also reported more prosocial attitudes on several programme-specific outcomes. In addition to examining the effectiveness for the full sample, the authors also report analyses that examine programme effects by (a) site and (b) initial levels of risk for gang membership. Based on results reported in this article, the Gang Resistance Education And Training (GREAT) programme II holds promise as a universal gang prevention programme.

## Study (author, year): Farrington and Walsh (2003)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Systematic review with meta-analysis using randomized or quasi-randomized control trials | Establish the effectiveness of family-based prevention programmes in reducing offending and antisocial behaviour by children and adolescents | The meta-analysis included 40 studies | Australia<br>Canada<br>Ireland<br>UK<br>US | Health evidence check | Strong (8)<br><br>No quality assessment of primary studies |

### Summary of key findings

Suggest that prevalence of offending could be reduced by between 10% and 15% by implementing such programmes.
More than half of all evaluations found a significant decrease in delinquency.
Effects on delinquency persisted in long-term evaluation studies.
Most effective types of programmes used behavioural parent training.
Least effective were those based in schools.
All other types of family-based programmes were effective.

## Study (author, year): Fisher *et al.* (2008a)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Systematic review | Determine the effectiveness of cognitive behavioural interventions for preventing youth gang involvement for children and young people (ages 7–16) | No published studies met the inclusion criteria. | None | Health evidence check | Unable to complete as no studies met the inclusion criteria |

### Summary of key findings

No evidence from randomized controlled trials or quasi-experimental studies exists (as of 2008) regarding the effectiveness of cognitive behavioural interventions for gang prevention.

Reviewers conclude that there is an urgent need for rigorous primary evaluations of cognitive behavioural interventions for gang prevention to develop this research field and guide future gang prevention programmes and policies.

## Study (author, year): Fisher *et al*. (2008b)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Systematic review | Determine the effectiveness of opportunities provision for preventing youth gang involvement for children and young people (ages 7–16) | No published studies met the inclusion criteria. | None | Health evidence check | Unable to complete as no studies met the inclusion criteria |

### Summary of key findings

No evidence from randomized controlled trials or quasi-experimental studies currently exists regarding the effectiveness of opportunities provision for gang prevention. Rigorous primary evaluations of gang prevention strategies are crucial to develop this research field, justify funding of existing interventions, and guide future gang prevention programmes and policies.

## Study (author, year): Hennigan (2014)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Tool design using two systematic reviews and tool testing at Los Angeles Gang Reduction and Youth Development (GRYD) programme | Develop a method of strengthening the prevention component by improving the identification of youth at high risk of gang joining | | US | | |

### Summary of key findings

Development and testing of the Gang Risk of Entry Factors assessment questionnaire

*Identified risk factors for gang entry*
Cumulative exposure to stressful life events
Non-delinquent problem behaviours
Delinquent beliefs
Parental supervision
Affective dimensions of peer networks

Characteristics of peer networks
Early delinquent behaviour

*Identify means of measurement*
Goodman Strengths and Difficulties Questionnaire for antisocial tendencies
Grasmick *et al*. general measure of self-control of impulses
Esbensen and Osgood scale to measure delinquent beliefs
Esbensen and Osgood scale to measure parental monitoring
Esbensen and Osgood scale to measure peer influence
Esbensen and Osgood scale to measure peer delinquency
Esbensen and Osgood scale to measure own delinquency and substance use

The findings confirm the assessment's effectiveness in prospectively identifying the youth most likely to join a gang within impacted communities. In the study sample, 100% of the boys who reported current gang membership, 81% of the boys who reported former gang membership, and 74% of the boys who reported hanging out with the gang at the post-test had been identified as high risk 12 to 18 months earlier on the baseline assessment. All but one of the 14 girls in the study who reported any gang involvement (including just hanging out) on the post-test had been assessed as high risk on the baseline interview.

## Study (author, year): Hodgkinson *et al*. (2009)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Systematic review of quasi-experimental studies with meta-analysis | To map the range of interventions implemented in response to gang-related criminal and antisocial behaviour, to examine the effectiveness of 'comprehensive' interventions in reducing violence and to identify mechanisms of change underpinning the practice of effective 'comprehensive' interventions | Systematic mapping of 208 studies (in 346 reports) and in-depth review studied 17 evaluations in 26 reports, meeting minimum quality threshold | Systematic map: 92% US, 7% Europe, 1% other<br><br>In-depth review: 100% US | Health evidence check | Strong |

### Summary of key findings

In-depth review focused on 'comprehensive' interventions defined as 'multi-faceted approaches encompassing more than one distinct type of intervention'. Interventions considered in the in-depth review include: targeted outreach, community-based partnerships, civil gang injunctions, aggression replacement training, community policing/problem-oriented policing, detached worker programmes, and specialized gang units.

The authors of this review suggest that 'comprehensive' interventions may be more effective than 'non-comprehensive' interventions, but there is insufficient evidence to make firm recommendations given the lack of sufficient quality studies. In high-/medium-quality studies in which the pooled effect size was positive and excluded the possibility of negative effect, the 'comprehensive' interventions included one or more of the following components:

- Case management/holistic personalized approach
- Community involvement in planning and delivery of interventions
- Expertise shared between agencies
- Incentives to change offending behaviour
- Authors conclude that there is insufficient evidence to justify a policy recommendation to use or not use 'comprehensive' interventions. Nevertheless, the pooled effect size of the high-/medium-quality studies is positive.

## Study (author, year): Huey *et al.* (2016)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Brief review and meta-analysis of quasi-experimental studies or randomized controlled trials | Identify the key characteristics of gang intervention programmes and assess the effectiveness of interventions at preventing gang involvement | Review included 38 evaluations (26 in meta-analysis) | 92% of studies from US, 8% from Canada | Health evidence check | Weak.<br><br>There was no reported assessment of quality. It was not apparent that results could be meaningfully combined given considerable heterogeneity. It is not clear that conclusions derive from data. |

### Summary of key findings

This review examined studies on youth who are predominantly gang affiliated, and it focused on prevention or reduction of gang involvement. It combined studies of prevention, intervention and comprehensive approaches, without disaggregating by intervention type, which may not be a meaningful comparison. The authors used a 'vote counting' approach (compare number of significant positive effects versus null effects) and a meta-analytic synthesis of the literature with effect sizes derived from 26 studies. The first analysis suggests that programmes may have more effect on antisocial behaviour than on gang involvement. However, meta-analysis shows small non-significant effects on antisocial behaviour and only modest significant effects on gang involvement.

### Study (author, year): James *et al.* (2013)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Systematic review with meta-analysis using randomized or quasi-randomized control trials | Examine effectiveness of juvenile aftercare programmes on recidivism | 22 evaluation studies | | Health evidence check | Strong |

#### Summary of key findings

Overall, aftercare has only a small positive effect on recidivism compared to control groups receiving 'treatment as usual' or no treatment. Effect sizes have become larger over the past 20 years, but the effect of aftercare is short term and is highly dependent on the quality of intervention implementation. The effect is greatest with high-risk populations and if the intervention is directed solely at the individual through individual treatment.

### Study (author, year): Lipsey (2009)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Meta-analysis of studies in meta-analytical database | Identify the general factors associated with effectiveness in juvenile offender programmes and provide an integrated analysis of the comparative effectiveness of different intervention modalities | Database comprises 548 study samples, 361 primary research reports | >90% of studies from US | Health evidence check | Strong<br><br>Search strategy not defined. Studies based on contents of database |

#### Summary of key findings

The major categories of moderator variables affecting recidivism outcomes for these studies were: the characteristics of the juvenile samples; the level of supervision; and the treatment philosophy on which the intervention is based. The level of juvenile justice supervision had little effect on effectiveness, suggesting that treatment is not highly context dependent. Interventions that embody 'therapeutic' philosophies are more effective than coercive approaches. Interventions applied to juveniles with higher levels of delinquency risk were more effective. Interventions that were implemented with high quality were more effective. Model programmes were included in this study, which may indicate that an average generic programme can be quite effective if implemented well and targeted at high-risk offenders. Particular care is needed to ensure that treatment providers are properly trained and supervised and service delivery is monitored.

## Study (author, year): Littell (2005)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Systematic review of randomized control trials | Effectiveness of Multisystemic Therapy for social, emotional, and behavioural problems in youth aged 10–17 | The meta-analysis included eight studies | Canada Norway US | Health evidence check | Strong |

### Summary of key findings

Outcome measures included archival data (police and court records) on arrests and/or convictions for criminal offences and incarceration in studies of juvenile offenders in the US and Canada. Measures of behavioural, psychosocial, and family outcomes were examined. Behavioural outcomes included antisocial behaviour (as measured by arrest or conviction of a criminal offence), drug use (self-reports and drug tests), and school attendance.

The most rigorous (intent-to-treat) analysis found no significant differences between MST and usual services in restrictive out-of-home placements and arrests or convictions. Pooled results that include studies with data of varying quality tend to favour MST, but these relative effects are not significantly different from zero. The study sample size is small and effects are not consistent across studies; therefore, it is not clear whether MST has clinically significant advantages over other services.

## Study (author, year): Livingstone *et al*. (2013)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Systematic review (Cochrane). Meta-analysis of RCTs or quasi-RCTs | Evaluate the effects of restorative justice conferencing programmes for reducing recidivism in young offenders | Four studies (16 citations) | US and Australia | Health evidence check | Strong |

### Summary of key findings

There is a lack of high-quality evidence regarding the effectiveness of restorative justice conferencing for young offenders. Based on limited evidence (four low-quality trials), there was no difference between those who are part of the restorative justice conferences and those in normal court proceedings in terms of the rate of reoffending after the intervention. There was also no difference between these two groups in terms of a change in their self-esteem or their satisfaction with the process. Young persons' sense of remorse, recognition of wrongdoing and their self-perception failed to change significantly.

## Study (author, year): National Crime Prevention Centre (2007)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Research brief that focused on 35 evaluation-type studies | To develop a more comprehensive understanding of what works, what does not work, and what is promising in terms of addressing youth gang problems | Narrative synthesis by effectiveness | US | Health evidence check | Moderate (5)<br><br>Search approach was not clear. No quality assessment of primary studies. No description of analysis approach |

### Summary of key findings

**Prevention**
DARE and GREAT I are the only universal prevention programmes presented in this review and the reasons why they failed is discussed. Klein and Maxson (2006) contend that four basic factors explain the failure of the GREAT programme: police officers delivered the programme; the programme was based on untested conventional wisdom that attitudinal variables or life skills trigger the attractiveness of gang membership; the content of the curriculum failed to incorporate the existing knowledge about gangs and it was not targeted at those most at risk of joining gangs.

The paper alludes to the effectiveness of early intervention universal prevention programmes to prevent delinquency.

The authors classify Multisystemic Therapy as an example of best practice to prevent or reduce delinquency measured by reductions in levels of re-arrest and out-of-home placements. They also say that evidence of family functioning and mental health outcomes is promising.

## Study (author, year): O'Connor and Waddell (2015)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Rapid review comprising a literature review and narrative rapid review of programmes | Assess the effect of interventions to prevent gang involvement and youth violence and classify programmes into effective, promising, ineffective and potentially harmful | Literature included approximately 22 reviews and approximately 10 primary studies (not reported how these studies were identified). Programme review 67 studies (programmes) with a robust evidence base from 790 clearing house evaluations | 67 interventions or programmes: Australia (number not reported). Canada (not reported). Germany (not reported). Netherlands (not reported). Spain (not reported). UK (33) US (all) | Health evidence check | Moderate (6) |

### Summary of key findings

The literature review highlighted approaches that have been associated with positive or harmful effects for young people. The key findings were:

» Skills-based and family-focused programmes are among the most robustly evaluated and effective types of programmes to prevent youth violence. These programmes aim to foster positive changes for children, young people and families as well as prevent negative outcomes. Mentoring, community-based and sports-based programmes to tackle youth crime and violence appear promising, but have a limited evidence base.
» The evidence behind programmes specifically designed to prevent young people from becoming involved in gangs is very limited or non-existent.
» Approaches based on deterrence and discipline (e.g. prison visits, boot camps) are ineffective, and may even make things worse (e.g. increase the likelihood of offending).

The review of programmes or interventions indicated that universal programmes such as skills-based school and parent and family programmes are usually effective in reducing aggression, substance misuse and antisocial behaviour, as well as improving behaviour and academic achievement.

The review also indicated that risk population programmes that combined school and family programmes as well as parent/family training with home visiting programmes are effective in reducing mother and child arrest and convictions and improving parenting practices, children's behaviour at home and school. Finally, the review of programmes for high-risk children found that family and trauma-focused therapy-based programmes have been found to be more effective in reducing problem behaviours, delinquency and offending, though that is not to say that all such programmes have been found to be, or will be, effective. In addition, family functioning may improve.

The most effective programmes were:
» Those that seek to create positive changes in the lives of young people and/or their families.
» School based or family focused, and involved skills practice, parent training, or therapy. Skilled facilitators (such as teachers or therapists) working regularly with children and/or families.
» Programmes that adhered to implementation fidelity.

## Study (author, year): Papachristos and Kirk (2015)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Quasi-experimental study design | To assess the effects of a 'pulling levers' focused deterrence strategy using a novel social network analysis approach to target the intervention | Gang factions in Chicago | US | MMAT | Strong (75%) |

### Summary of key findings

Authors found a 23% reduction in shootings after attending a call-in, suggesting that if at least one faction member attended a call-in that faction would be involved in 23% fewer shootings in the following year. In addition, representation at a call-in led to a 32% reduction in fatal or non-fatal victimization in the following year. Given incomplete data on offending patterns, it can only be concluded that treatment factions are no more likely than control factions to be perpetrators of shootings and may, in fact, be less likely.

## Study (author, year): Petrosino (2013)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Systematic review with meta-analysis using randomized or quasi-randomized control trials | Assess the effects of programmes comprising organized visits to prisons by juvenile delinquents (officially adjudicated or convicted by a juvenile court) or pre-delinquents (children in trouble but not officially adjudicated as delinquents), aimed at deterring them from criminal activity | The meta-analysis included nine studies | US | Health evidence check | Strong (10) |

### Summary of key findings

Petrosino and colleagues conclude that programmes such as 'Scared Straight' are likely to have a harmful effect and increase delinquency among youths relative to doing nothing at all. Given these results, we cannot recommend this programme as a crime prevention strategy.

## Study (author, year): Piquero (2008)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Systematic review with meta-analysis using randomized or quasi-randomized control trials | Establish effectiveness of early family/ parent training programmes on antisocial behaviour and delinquency | The meta-analysis included 55 studies | Australia (7)<br>Canada (2)<br>China (1)<br>Netherlands (1)<br>New Zealand (1)<br>UK (5)<br>US (38) | Health evidence check | Strong (10) |

### Summary of key findings

Results of this review indicate that early family/parent training is an effective intervention for reducing short-term behavioural problems among young children and the weighted effect size was 0.35 approximately, corresponding to 50% recidivism in the control group compared with 33% recidivism in the experimental group.

The results demonstrated that there were significant differences in the effect sizes of studies conducted in the US versus those conducted in other countries and that studies that were based on samples smaller than 100 children had larger effect sizes. Sample size was also the strongest predictor of the variation in the effect sizes. Additional descriptive evidence indicated that early family/parent training was also effective in reducing delinquency and crime in later adolescence and adulthood.

## Study (author, year): Piquero (2010)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Systematic review with meta-analysis using randomized or quasi-randomized control trials | Assess the available research evidence on the effect of self-control improvement programmes on self-control and delinquency and problem behaviours. In addition to investigating the overall effect of early self-control improvement programmes, this review examines, to the extent possible, the context in which these programmes may be most successful. | The meta-analysis included 34 studies | Canada (2)<br>Israel (1)<br>US (30)<br>Not reported (1) | Health evidence check | Strong (10) |

### Summary of key findings

The studies included in this systematic review indicate that self-control improvement programmes are an effective intervention for improving self-control and reducing delinquency and problem behaviours up to the age of 10 (considered short-term effects), and that the effect of these programmes appears to be robust across various weighting procedures, and across context, outcome source, and based on both published and unpublished data.

The authors conclude that self-control improvement programmes should continue to be used to improve self-control and reduce delinquency and behavioural problems up to age 10, which is the age cut-off where Gottfredson and Hirschi argue that self-control becomes relatively fixed and no longer malleable.

## Study (author, year): Smith-Moncrieffe (2013)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Before and after evaluation (independent of implementors) | Youth Gang Prevention Fund (YGPF) intervention projects aimed at reducing the number of gang-involved youth in communities with a known or emerging gang problem. To determine what works in gang crime prevention, 14 impact evaluation studies of gang projects were conducted across Canada. | 17 projects in 23 sites over a five-year period throughout Canada. Three projects were excluded from the synthesis: one had not completed its evaluation and the other two did not have the required data. There appears to be 10 evaluation studies in the synthesis. | Canada | PRISM RCT criteria | Weak (4/11)<br><br>Method for calculating sample size not provided. Approaches to blinding, confounding and intention to treat analysis not clear. According to the evaluators, intervention fidelity was also an issue. |

### Summary of key findings

Six of the 10 studies measured behavioural outcomes. Four of these six studies (67%) reported results that indicate positive change in at least one behavioural outcome. Behaviours assessed include police contact, violent and non-violent offending and gang involvement. Gang involvement, police contact and non-violent offending behaviour such as theft and selling illegal drugs were the most likely outcomes to be reduced. Violent offending was less likely to be reduced, as most youths in these gang prevention projects did not have a violent offending history. The main behaviour-related findings were:

Gang Prevention Strategy (violent offending): There was a statistically significant reduction (22%) in the youth committing physical assaults by the end of the programme.

Youth Advocate Programme: By the end of the programme, the youth showed a decrease in delinquency and conduct problems. Reductions in victimization were significant, with a moderate effect size (0.55).

Surrey Wraparound (police contact): Results show a significant decline (67%) in police contacts relative to the comparison group.

Gang exit (also known as the gang membership variable) was a key measure in the Youth Gang Prevention Fund projects. Most of the projects targeted both youth at risk of gang involvement and gang-involved youth. The gang exit findings suggest that for the four projects that were able to measure the gang exit rate at the end of the programme, between 41% and 67% of the youth were no longer gang involved by the end of the project. In some projects the evaluators were able to measure the gang exit rate beyond the post-programme period. The Regina Anti-Gang Services project had 100% of its participants involved

in gangs and by the final follow-up stage (approximately 12 months post-programme) had 71% of its participants exit their respective gangs. Similarly, evaluators found that 100% of the youth in the Youth Alliance Against Gang Violence project had exited their respective gangs by the final follow-up measure (approximately 12 months post-programme).

### Study (author, year): Wilson (2005)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Systematic review with meta-analysis using randomized or quasi-randomized control trials | To synthesize the extant empirical evidence on the effects of boot camps and boot camp-like programmes on criminal behaviour | 32 unique research studies met our inclusion criteria. These studies reported the results from 43 independent boot camp comparison samples. | Most of these studies evaluated boot camps in the US. One evaluated a Canadian programme and one evaluated two separate programmes in Great Britain. | Health evidence check | Strong |

#### Summary of key findings

The current evidence suggests that this common and defining feature of a boot camp is not effective in reducing post-boot-camp offending.

### Study (author, year): Wong *et al.* (2012)

| Study type | Study aim | Sample | Countries | Study quality | |
|---|---|---|---|---|---|
| | | | | Appraisal tool used | Overall appraisal |
| Systematic literature review and attempted meta-analysis of evaluation studies (randomized, quasi and before and after) focused on-street gang control strategies | Identify which strategies are most effective in reducing or preventing gang-related crime and delinquency | Narrative synthesis of 38 study findings (gang activity regulation n=17, comprehensive n=5) | Australia<br>Canada<br>US<br>Other European countries<br><br>Included US (n=37) and Canada (n=1) | Health evidence check | Strong (8)<br>No quality assessment of primary studies |

## Summary of key findings

**Prevention**
Five studies were assigned to the preventive awareness category. Four of these five studies were evaluations of school-based gang prevention programmes, while the Thurman *et al.* (1996) study evaluated the Neutral Zone programme, an approach that provided recreational activities, counselling, and social activities for youths on weekend nights. The evaluation of Neutral Zone assessed the outcome of weekend calls for service to police, a measure not comparable with the outcomes assessed by the other gang prevention approaches. Across the remaining four studies, the only significant treatment effect found was for lower rates of gang membership in the evaluation of the GREAT II programme (Esbensen *et al*. 2011).

In Wong *et al.*, none of the assessments of treatment (targeted prevention programme) effects on delinquency outcomes demonstrated a significant reduction in gang-joining behaviours. Across the five gang membership prevention programme evaluations, no significant treatment effects were found for gang membership, arrests, or drug use – other than a lower rate of alcohol use in one cohort evaluation of the Youth Development Workers programme (YDW). The only other significant effect seen across the gang membership prevention programmes was a lower rate of gang involvement found in the evaluation of the Logan Square Prevention project (LSP; Godley *et al*. 1998). The LSP project involved a coalition of agencies providing school- and community-based prevention services to youths with a focus on reducing substance use and gang involvement.

Gang activity regulation is subdivided into gang activity prevention programmes which target active gang youth to minimize their impact on communities and gang activity suppression, which also targets active gang members to deter or suppress gang-related criminal activity. Gang activity prevention programmes seek to offer alternatives to gang activity or stop gang activities before they occur through enhanced police presence, curfew or truancy enforcement, street barriers, etc.). Programmes focused on providing alternatives were not found to be effective. Evaluations of programmes focused on preventing gang activity had mixed findings and lacked methodological rigour.

Gang activity suppression strategies seem to be less effective than gang activity prevention strategies. Police activity may reinforce cohesiveness of the gang and members' reliance on each other.

Gang activity suppression programmes found consistent positive outcomes. The more specific the strategy in its target population, the more the programmes yielded positive results. 'Pulling levers' strategies have the most consistently positive results of all the strategies included in this study. 'Pulling levers' strategies have the most specified targeted population and are the most consistently effective solution to gang-related violence. However, these strategies only target gun delinquency. The application of the 'pulling levers' concepts in many cities has proven that gun crime can be effectively reduced, making it easier to deal with less serious crime. An effective suppression strategy needs to consider group processes. There are more promising results when specific activities are targeted rather than the gang itself. This review seems to point towards the use of 'pulling levers' strategies as effective. Close cooperation is needed between academics, policy-makers and police for implementation and continuity.

# Appendix 5:

# Study characteristics of included primary studies for Q3 in-depth analysis of gang desistance

| Qualitative studies | Quality appraisal | Study aim | Sample (location) | Study orientation | Potential relevant data to best fit framework synthesis master codes |
|---|---|---|---|---|---|
| Berger *et al.* (2016) | Moderate (75%) | To identify factors associated with desistance of core gang members and describe the nature that these 'formers' have undergone | Data from in-depth interviews with 39 ex-gang core members (80% male; 20% female) recruited by purposive sampling with the assistance of two ex-gang members and snowball sampling to others involved in gang prevention in California | Grounded theory study | The triggering stage<br>The contemplation stage<br>The exploration stage<br>The exiting stage<br>The maintenance stage |
| Bolden (2013) | Moderate (75%) | To examine the process and methods of leaving and joining gangs | 48 in-depth interviews with 15 current gang members, 20 former gang members and 13 ambivalent responders (on the fence) in Texas and Florida | Investigate through social network dynamics | Initiation into the gang<br>Leaving the gang<br>Escaping the gang<br>Reasons for leaving the gang |

| Qualitative studies | Quality appraisal | Study aim | Sample (location) | Study orientation | Potential relevant data to best fit framework synthesis master codes |
|---|---|---|---|---|---|
| Campbell and Hansen (2012) | Moderate (75%) | To examine factors that encouraged or discouraged drug traffickers to leave the drugs business | In-depth life history interviews with 30 ex-traffickers formerly involved in the illicit drugs business along the US–Mexico Border | Ethnographic study | Punishment<br>Self-image and identity<br>Social ties and changes in the life course<br>Drug use/abuse (turning points)<br>Analysing narcotic use trajectories: life paths and evolving identities (not post-exit identities)<br>Conclusion (identity limbo)<br>Traffickers often want to quit but still maintain a self-image as outlaws, non-conformists or rebels. Their conflicted self-identities make them proud of their exploits but scared of prison, cartel violence and addiction to narcotics. Treatment modalities for retired traffickers must take these factors into consideration. |
| Decker, Pyrooz and Moule (2014) | Moderate (50%) | To describe the general process undertaken by individuals leaving the gang, to identify 'snags' and 'pulls' that emerge during the process, and to describe how the transition out of the gang is affected by others' recognition of the status as a 'former member', including members of the gang, rival gangs and the police. | Data from interviews with 260 former gang members from four cities in the US recruited through street outreach programmes, prisons, and probation or parole | Life course perspective and theory of role exit | First doubts<br>Anticipatory socialization (seeking alternatives)<br>Turning points<br>Post-exit validation<br><br>Role exit theory described in this paper was chosen as the best fit framework for synthesis of data from all included studies. |

| Qualitative studies | Quality appraisal | Study aim | Sample (location) | Study orientation | Potential relevant data to best fit framework synthesis master codes |
|---|---|---|---|---|---|
| Deuchar *et al*. (2016) | High (100%) | To describe the extent and the ways in which young men's participation in a boxing club coincided with the reconstructions of masculinities and journeys towards desistance | Interviews and participant observation with 22 young ethnic minority males attending a boxing club (Denmark) | Ethnographic study | Progress, relapse and the zig-zag nature of desistance journeys<br><br>The dilemma of boxing: reconstructing masculinity and peer groups<br><br>Metaphors, therapy and transitional masculinity |
| Flores (2009) | Moderate (75%) | To explain exit from gang lifestyle and how acculturation into a group promoting mainstream American values may enable gang exit by providing shelter against downward mobility through 'religious optimism' | Interviews with ex-gang members attending a church | Ethnographic study using a race gender framework | Values, style and masculinity<br>Religious optimism<br>Reformed barrio masculine acculturation and upward mobility<br>Work<br>Muscular Christianity |
| Goodwill and Ishiyama (2016) | Moderate (75%) | To generate a categorical scheme to describe how participants exited from gang life | Analysis of critical incidents reports relating to gang exit from 10 indigenous men (Canada) | | Descriptive vignettes are provided giving qualitative data on the main themes to emerge when responses are counted. |

| Qualitative studies | Quality appraisal | Study aim | Sample (location) | Study orientation | Potential relevant data to best fit framework synthesis master codes |
|---|---|---|---|---|---|
| Halsey *et al*. (2016) | Moderate (75%) | To examine setbacks and recovery in desistance from crime and describe the derailing of the desistance process | Interview data from three cohorts: (1) 14 young men aged 25–29 years at final interview interviewed in Australia between 2003 and 2013 (n=135 interviews); (2) 48 men interviewed prior to release from prison in 2007, two weeks post-release and within the year after in the US, and (3) 12 women interviewed in prison in 2011 | Grounded theory approach | Potential threats to desistance<br><br>Inability to achieve and sustain 'success'<br><br>Communication breakdown with correctional supports<br><br>Difficulties of desistance not recognized by correctional supports<br><br>Self-sabotage to express the pains of transition<br><br>Derailing desistance<br><br>De-escalating derailment |
| Moloney *et al*. (2009) | Moderate (75%) | To examine fatherhood as a potential turning point in the lives of gang members | Interviews with 91 gang members in San Francisco | | Life changes – fatherhood<br><br>Subjective transformations<br><br>New priorities and future<br><br>The timing of changes<br><br>Limits to the effectiveness of fatherhood on desistance<br><br>The challenge of economic provision, fatherhood<br><br>Gangs, peers and the difficulties of knifing off |

| Qualitative studies | Quality appraisal | Study aim | Sample (location) | Study orientation | Potential relevant data to best fit framework synthesis master codes |
|---|---|---|---|---|---|
| Nugent and Schinkel (2016) | High (100%) | To examine the challenges of desistance, the consequences of these challenges and how these challenges relate to act-desistance, identity desistance and relational desistance | Cross-sectional study of 27 long-term prisoners at different stages of their sentence conducted in 2009/10 and a series of interviews with five young offenders (four male, one female) aged 16–21 conducted at baseline, two months, six months and 12 months after desistance from a short career in offending | | Pain of isolation<br>Pain of goal failure<br>Pain of hopelessness<br>Act-desistance<br>Identity desistance<br>Relational desistance<br>Knifing off relationships |
| O'Neal *et al*. (2016) | Moderate (50%) | To examine whether the catalysts and consequences of gang disengagement differ between males and females | 143 individuals interviewed about their status as former gang members | Role exit theory and feminist criminology | (1) the motivations for leaving the gang, (2) sources of support in the exit process, and (3) real and perceived residual concerns and consequences in transitioning out of the gang. Explore comparisons between men and women in exiting gangs |
| Sogaard (2015) | Moderate (75%) | To highlight the gendered dynamics underlying reformatory interventions and explore key aspects of the identity work inherent in young men's desistance from criminal and drug careers | Participant observation, focus groups and interviews with programme participants aged 18–28 years with lengthy histories in the criminal justice system | | |

| Quantitative studies | Quality appraisal | Study aim | Sample (location) | Study orientation | Potential relevant data to best fit framework master codes |
|---|---|---|---|---|---|
| Carson *et al.* (2013) | Moderate (75%) | To compare three operational definitions of gang desistance and examine differences between them in terms of motivations, methods and consequences associated with gang exit | Pooled cross-sectional data from the second national evaluation of the GREAT II programme started in 2006 in 31 schools across seven cities in the US (n=15,298)<br><br>School-based sample. | | First doubts<br>Post-exit validation |
| Decker, Pyrooz and Moule (2013) | Moderate (50%) | To explore how embeddedness is related to distancing oneself from the gang | Data from interviews with 260 individuals, on probation or parole, who had left gangs, from four cities in the US<br><br>Detention sample | Life course perspective | Post-exit validation |
| Melde, Diem and Drake (2012) | Moderate (75%) | To explore whether gang organization, role centrality, reasons for joining a gang, and involvement in violent delinquency and victimization are associated with stable gang membership | Panel data from 140 gang members drawn from the national evaluation of the GREAT programme conducted in the 1990s in 22 schools across six cities in the US<br><br>School-based sample | | First doubts (disillusionment) |
| Melde and Esbensen (2014) | Moderate (75%) | To explore the relative impact of gang joining and exit on adolescent involvement in delinquency and determine the mechanisms associated with these changes in deviant behaviour | Six waves of longitudinal data from 512 gang-involved youth selected from the second national evaluation of the GREAT programme started in 2006 in 31 schools across seven cities in the US<br><br>School-based sample. | | Post-exit validation |

| Quantitative studies | Quality appraisal | Study aim | Sample (location) | Study orientation | Potential relevant data to best fit framework master codes |
|---|---|---|---|---|---|
| Pyrooz and Decker (2011) | High (100%) | To examine the process of leaving the gang, including the motives for why and the methods for how one leaves | Cross-sectional data collected from interviews with 84 juvenile arrestees in the Arrestee Drug Abuse Monitoring Program (Arizona), all of whom left their gang<br><br>Detention sample | Life course criminology | First doubts<br>Post-exit validation<br>Seeking alternatives |
| Pyrooz, Sweeten and Piquero (2013) | High (100%) | To explore the relationship between embeddedness in a gang and desistance from gang membership | Nine waves of panel data spanning five years on 226 adjudicated youth aged 14–16 and reporting gang membership at baseline drawn from the Pathways to Desistance study, a longitudinal study initiated in 2000 of youth found guilty of a serious felony, misdemeanour weapons, or misdemeanour sexual assault offence in two cities in the US<br><br>Detention sample | Social network and life course frameworks | First doubts |
| Pyrooz, Decker and Webb (2014) | Moderate (50%) | | Using a cross-sectional detention sample of juvenile arrestees, the authors first compared differences between 156 current and 83 former gang members at a bivariate level<br><br>Detention sample | | Examining the social and emotional ties that former gang members maintain with their previous gang network |

| Quantitative studies | Quality appraisal | Study aim | Sample (location) | Study orientation | Potential relevant data to best fit framework master codes |
|---|---|---|---|---|---|
| Sweeten, Pyrooz and Piquero (2013) | High (100%) | To examine the relationship between disengagement from gangs and desistance from crime | Nine waves of panel data spanning five years on 226 adjudicated youth aged 14–16 and reporting gang membership at baseline drawn from the Pathways to Desistance study, a longitudinal study initiated in 2000 of youth found guilty of a serious felony, misdemeanour weapons, or misdemeanour sexual assault offence in two cities in the US<br><br>Detention sample | Life course criminological framework | Post-exit validation |
| Weerman *et al*. (2015) | High (100%) | To explore the association between gang membership transitions and changes in peer networks, social bonds and problem behaviours | Two longitudinal studies, (1) NSCR School Study: three waves of longitudinal data collected annually starting in 2002 from 13 and 15-year-old secondary school students (n=1,385, 76% response rate), and (2) Rochester Youth Development Study: multi-wave longitudinal study of high-risk youth aged 14 at baseline (n=890).<br><br>School-based samples | | Post-exit validation |

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