Title Registration for a Systematic Review: Preventive Interventions to Reduce Youth Gang Violence in Low- and Middle-Income Countries: A Systematic Review
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TITLE OF THE REVIEW

Preventive Interventions to Reduce Youth Gang Violence in Low- and Middle-Income Countries: A Systematic Review

BACKGROUND

Youth gang violence is a problem that is widespread throughout the developing world. Research suggests that over 85,000 people are members of gangs in El Salvador, Guatemala and Honduras (Seelke, 2013) and that gang activities – and particularly those of youth gangs – contribute significantly to the violent crime problem in low- and middle-income countries. The cost of violence in Latin America is estimated at approximately 14.2 per cent of GDP – almost three times the proportion of GDP reported in industrialised countries (Seelke, 2013). Gang violence makes up a significant proportion of this cost: the annual cost of violent crime in El Salvador is reported at US$ 1.7 billion, with gang violence accounting for 60 per cent (Seelke, 2013).

Gang violence undermines social cohesion in communities, creating fear amongst residents (see Lane & Meeker, 2003; Seelke, 2013; Washington Office of Latin America [WOLA], 2006) and resulting in people avoiding certain areas of neighbourhoods known to be gang areas. George Tita and his colleagues explain that these places develop an appearance of visible disorder as non-gang activity in the neighbourhood is abandoned (Tita, Cohen, & Engberg, 2005). Youth gangs are also increasingly associated with trafficking in drugs, arms and humans (Organization of American States [OAS], 2007).

Violence may be used to defend or expand gang turf, recruit new members, keep members from leaving, exclude or remove undesired members, exercise revenge or seek redress for actual or perceived wrongs, enhance perceptions of power and invincibility, gain respect or dominance over others, and enforce the gang rules (Pacheco, 2010). Although there are significant negative repercussions in the life course for members of youth gangs (Cruz, 2007; Davies & MacPherson, 2011; OAS, 2007; WOLA, 2006), for many young people who lack other opportunities, gangs offer a sense of belonging and purpose (Howell, 2012; Tobin, 2008).

Researchers often contest a uniform definition of a youth gang, as it varies by time and place (Howell, Egley, & O’Donnell, n.d.). Notwithstanding these debates, the literature typically describes a gang as comprising between 15 to 100 members, generally aged 12 to 24; members share an identity linked to name, symbols, colours or physical or economic territory; members and outsiders view the group as a gang; there is some permanence and degree of organisation; and there is involvement in an elevated level of criminal activity (Decker & Curry, 2003; see also Esbensen, Winfree, He, & Taylor, 2001; Howell et al., n.d.; Huff, 1993; Miller, 1992; Rodgers, 1999; Spergel, 1995; Theriot & Parker, 2008). There have
been significant efforts amongst academics and policy makers to reach agreement on the
definition of a youth gang. The “Eurogang Working Group” (see The Eurogang Project,
2012) consensus definition is as follows: “A street gang (or troublesome youth group
corresponding to a street gang elsewhere) is any durable, street-oriented youth group whose
involvement in illegal activity is part of its group identity” (Weerman et. al., 2009, p.20). A
youth gang is differentiated from an adult gang if the majority of the gang members are aged
between 12 and 25 (Weerman et. al., 2009). Alternatively, the General Secretariat of the
Organization of American States (OAS) adopted a consensus definition of youth gangs using
a rights-based approach that looks to the social function the gang plays for its members as a
means to overcome “extreme poverty, exclusion, and a lack of opportunities” (OAS, 2007,
p.5). The OAS definition does not require that illegal activities are a defining characteristic
of youth gangs but acknowledges that a youth gang “frequently generates violence and crime
in a vicious circle that perpetuates their original exclusion” (OAS, 2007, p.5).

Whilst not all youth gangs are involved in crime or violence, it is understood that gangs
evolve along a continuum towards criminality and violence, from youth gangs that engage in
non-criminal activities to youth gangs actively involved in serious violent behaviour (OAS,
2007). In order to reduce the prevalence of youth gang violence, it is important to target the
violence directly and also to target the process of young people joining youth gangs.

This systematic review aims to assess the effectiveness of interventions that seek to prevent
(or reduce) gang recruitment and formation, reduce gang activity (particularly violent
activity), and reduce the negative effects of gangs on local communities. Identification of
effective youth gang prevention programs, undertaken using systematic review techniques,
offers the chance for countries, particularly low- and middle-income countries, to reduce the
economic and social costs associated with the violence undertaken within the context of
youth gangs.

**OBJECTIVES**

There are two key objectives to this review.

1. The first objective is to review the evidence on the effectiveness of interventions
designed to prevent involvement in youth gang violence in low- and middle-income
countries, and assess whether effectiveness differs according to intervention type and
across different populations.

2. The second objective of the review is to identify the reasons why preventive
interventions to reduce youth involvement in gang violence may fail or succeed in
low- and middle-income countries.
EXISTING REVIEWS

Two systematic reviews previously published in the Campbell library consider gang involvement for children and young people (Fisher, Montgomery, & Gardner, 2008a, 2008b), focusing on cognitive-behavioural and opportunities provision interventions to prevent gang involvement – interventions predominantly utilised in high income nations.

We propose that there are clear differences in the application and success of gang prevention programs between those implemented in high income (predominantly western) nations, and those implemented in low- and middle-income nations. We suggest that the motivations for joining and remaining with a gang will differ across regions for a variety of reasons, primarily because many low- and middle-income countries experience – or have experienced – some form of war or conflict (for example, Colombia, Nicaragua and South Africa). Post-conflict societies can provide fertile ground for gang formation and gang violence. In some post conflict nations, people live within an existing culture of violence, experiencing a low sense of citizen security and distrust of authorities alongside poor economic outlooks and easy access to firearms and drugs (Cruz, 2007; Davies & MacPherson, 2011).

Given the different antecedents, motivations, and social, economic and political conditions that give rise to gang formation and gang violence, we plan to focus our review on interventions aimed at combating youth gang formation and violence in countries classified as low- and middle-income by the World Bank (World Bank, 2013).

INTERVENTION

Responses to the problem of youth gang violence in low- and middle-income countries can be grouped into one of two categories: suppression or prevention. Suppression approaches aim to combat gang violence in a reactive way that attempts to stop the criminal behaviour reoccurring, generally using legislative or policing resources. By contrast, prevention programs focus on capacity building and social prevention and are designed to work proactively to stop gang crime before it occurs, either by preventing youth from joining gangs (primary and secondary prevention) or by rehabilitating gang members (tertiary prevention) (Esbensen, 2000; Van Der Merwe & Dawes, 2007). Whilst acknowledging the many suppression strategies that are enacted to combat youth gang violence, in line with a rights-based approach this review will focus on interventions that use primary, secondary or tertiary prevention strategies.

Primary prevention strategies are applied most broadly to the entire at-risk population (Esbensen, 2000), in this case, all young people. Primary prevention programs include general community and school based programs to enhance the life skills and resilience of adolescents. An example of a primary prevention program is the Gang Resistance Education and Training (GREAT) program, a school based curriculum run by law enforcement officers that uses elements of cognitive-behavioural training, social skills development and conflict
resolution to improve young people’s resistance to gang membership (Esbensen & Osgood, 1999). This program was developed in North America, and has been delivered in Belize, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, and Panama (GREAT, 2013).

Secondary prevention strategies target those individuals who are identified as being at higher risk of joining gangs (Esbensen, 2000). Many of these programs provide a mix of education, therapeutic services, and recreational opportunities. An example of a program that has a secondary prevention component is the Por Mi Barrio Outreach Centres, a program implemented in Central America by the United States Agency for International Development (USAID) that focuses on creating a safe space for youth to engage in recreational activities (USAID, 2010).

Tertiary prevention strategies target youth who have already become involved in gangs or criminal behaviour (Esbensen, 2000). Tertiary prevention programs are designed to reintegrate ex-gang members pro-socially into society, by focusing on rehabilitation and education. An example of a tertiary prevention program is the Medellin program in Guatemala, which provides at-risk youth with access to long-term employment programs through state and private institutions on the proviso that gang members withdraw from their gang (Cooper & Ward, 2008).

**POPULATION**

This review focuses on preventive interventions aimed at reducing youth involvement in gangs and gang violence. Whilst research suggests the majority of gang members are 12 to 24 years of age (Howell et al., n.d.; Huff, 1993; Rodgers, 1999), we acknowledge that the definitions of youth vary by country, and that a strict age cut-off may not be appropriate. We will therefore include interventions that are defined as “targeted towards youth gangs”, or where the target age range is closely aligned to the 12–24 year category. We will only consider studies from low- and middle-income countries.

**OUTCOMES**

Preventive interventions to reduce youth gang membership have a number of direct and indirect outcomes: direct outcomes measure the change in youth gang participation; indirect outcomes measure the change in the negative consequences of youth gang activities, including levels of crime and violence. Figure 1 represents the logic model of preventive interventions to reduce gang violence, showing both direct and indirect outcomes.
We will code all outcomes related to individual or aggregate measures of youth participation in gangs and/or gang violence. These outcomes may include: individual measures of arrests, reoffending, gang membership; self-reported, peer-reported or officially-reported crime; geographically aggregated measures of youth gang participation, youth gang arrests and/or youth gang violence; and perceptions of youth gang participation and/or youth gang violence. We will analyse these outcomes separately in the synthesis stage. In particular, we will ensure that individual and geographically aggregated outcomes are analysed separately.

**STUDY DESIGNS**

**Inclusion criteria:**

Interventions must either (1) state that they explicitly aim to reduce participation in youth gangs, or (2) aim to reduce levels of youth gang involvement in violent crimes, or (3) report at least one outcome of involvement in youth gangs.

Interventions must adopt a preventive approach, implemented at either primary, secondary, or tertiary stages of prevention.

Interventions must be aimed at youth. We nominally define youth as 12–24 years old, but recognise that this definition may vary across countries; therefore we will also include interventions where the author states that the intervention was aimed at children, adolescents, young people or youth.
Interventions must be aimed at youth gangs. Given the lack of a clear consensus definition of youth gangs, we take a broad approach and include any intervention where (1) the target group meets the Eurogang definition of youth gangs (see above), or (2) the target group is identified by the authors as a youth gang.

We will only include interventions that were undertaken in a low or middle income country as defined by the World Bank (World Bank, 2013).

We will include studies undertaken since 1980.

We will include studies where the unit of analysis is the individual or a place. Studies that measure different units of analysis will synthesised separately.

**Exclusion criteria:**

Studies published prior to 1980 or report on interventions that took place prior to 1980 are not eligible for review.

We will exclude evaluations of interventions implemented in countries categorised as high income by the World Bank.

**Eligible study designs:**

To be included in the synthesis of intervention effectiveness, studies must use an experimental or quasi-experimental evaluation design with a valid comparison group. We will include randomised trials, natural experiments, time-series designs, regression discontinuity designs, and any quasi-experimental design with a matched or non-matched comparison group, including matched comparison groups, propensity score matched comparisons, and post-hoc statistically matched comparisons. We will include evaluations where the comparison group is “business as usual”, or no intervention, as well as those evaluations where two treatments are compared with no baseline “business as usual” comparison. Although designs that compare two treatments without a baseline are subject to a greater degree of bias, we will identify and include these studies should they exist, and deal with them separately in the analytic stage.

To be eligible for inclusion in a meta-analysis, the study must report an effect size, or provide sufficient detail such that an effect size can be calculated.

For inclusion in the narrative review of implementation success, studies are not required to use experimental or quasi-experimental designs. In order to capture the broadest range of evidence that speaks to the reasons for success or failure, we will include qualitative process review documents, noting the methods used by the authors to reach their conclusions. We define qualitative process review documents as those studies that evaluate the process of intervention implementation, but use a qualitative rather than an experimental or quasi-experimental design; for example, key informant interviews or focus groups. These studies
need not be linked to the studies included in the meta-analysis of intervention effectiveness, and will form an additional corpus of literature.

**Method of synthesis:**

If the systematic search results in the extraction of suitable data for meta-analysis, we will use meta-analysis to synthesise the results of the included evaluations. We will use a random-effects model with inverse variance weighting to combine study results. We will display results of all meta-analyses using forest plots, including 95% confidence intervals for the estimates of all effect sizes.

We will examine sources of heterogeneity in the intervention impact, including intervention strategy, location, conflict or post-conflict status, age and gender of participants, using subgroup analysis (analogue to the ANOVA) for categorical outcomes and meta-regression for continuous predictors. We will test and adjust for publication bias using a range of approaches suggested in Rothstein, Sutton, and Borenstein (2006); depending on the data collected, this may include funnel plots and trim-and-fill analysis.

We will use Comprehensive Meta-Analysis software for calculations and production of figures.

We will provide a narrative thematic review of process evaluations of key interventions, summarising the authors’ conclusions regarding reasons for success or failure, along the causal chain.
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POTENTIAL CONFLICTS OF INTEREST

None of the authors have any known conflict of interest.

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DECLARATION

Authors’ responsibilities

By completing this form, you accept responsibility for preparing, maintaining, and updating the review in accordance with Campbell Collaboration policy. The Coordinating Group will provide as much support as possible to assist with the preparation of the review.

A draft protocol must be submitted to the Coordinating Group within one year of title acceptance. If drafts are not submitted before the agreed deadlines, or if we are unable to contact you for an extended period, the Coordinating Group has the right to de-register the title or transfer the title to alternative authors. The Coordinating Group also has the right to de-register or transfer the title if it does not meet the standards of the Coordinating Group and/or the Campbell Collaboration.

You accept responsibility for maintaining the review in light of new evidence, comments and criticisms, and other developments, and updating the review every five years, when substantial new evidence becomes available, or, if requested, transferring responsibility for maintaining the review to others as agreed with the Coordinating Group.

Publication in the Campbell Library

The support of the Coordinating Group in preparing your review is conditional upon your agreement to publish the protocol, finished review and subsequent updates in the Campbell Library. Concurrent publication in other journals is encouraged. However, a Campbell systematic review should be published either before, or at the same time as, its publication in other journals. Authors should not publish Campbell reviews in journals before they are ready for publication in the Campbell Library. Authors should remember to include a statement mentioning the published Campbell review in any non-Campbell publications of the review.

I understand the commitment required to undertake a Campbell review, and agree to publish in the Campbell Library. Signed on behalf of the authors:

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