

Chapter 12

A Brief Review and Meta-Analysis of Gang Intervention Trials in North America

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12.1 Introduction

After more than 50 years of gang intervention research, the field remains divided regarding best practices for reducing gang membership and gang-related crime in high-risk populations. For example, in their review of the literature a decade ago, Klein and Maxson (2006) argued that results were indeterminate concerning gang prevention and intervention effects because most programs were unevaluated or poorly evaluated. By contrast, Howell (2007, 2010) argued that this view was too pessimistic, and noted that a number of promising and effective gang-related prevention and intervention programs do exist.

Fortunately, controlled outcome research has increased in recent years (e.g., Wong et al. 2012), which allows for the use of robust data synthesis methods to discern whether gang interventions are effective. In this chapter, we address three primary questions regarding gang-related intervention programs. First, what are key characteristics of controlled evaluations of gang interventions? Second, are interventions generally effective at preventing and reducing gang involvement and antisocial behavior? Third, what challenges arise in efforts to synthesize this literature?

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12.2 Method

12.2.1 Literature Search

As an initial step, we conducted an electronic literature search using the following databases: ERIC, Library and Information Science Abstracts (LISA), ProQuest Dissertations and Theses, ProQuest Research Library, PsycArticles, PsycCritiques, PsycInfo, Social Services Abstracts, and Sociological Abstracts (years 1950 through June 2014). Terms representing gangs (e.g., *gang*, *gangs*), intervention (e.g., *intervention*, *treatment*, *prevention*), and controlled evaluation (e.g., *control*, *controlled*, *random*) were utilized. This search yielded 219 studies, and the titles and abstracts were screened for eligibility.

The electronic search was supplemented with reference lists from gang-focused meta-analyses and reviews (e.g., Esbensen 2000; Wong et al. 2012), as well as unpublished, *in press*, and published studies recommended by gang researchers.

12.2.2 Inclusion Criteria

In this chapter, we include a brief descriptive review (i.e., a summary of study characteristics and treatment effects) and meta-analysis (i.e., a quantitative summary of effect sizes). Studies were eligible if they included predominantly gang-affiliated individuals, focused on the prevention or reduction of gang involvement, assessed gang-related outcomes, or included gang affiliation as a predictor or moderator of intervention outcomes. Moreover, studies had to: (1) include a control or comparison group; (2) assess gang-related or antisocial behavior as intervention outcomes; (3) report posttreatment or follow-up outcomes for individual participants; and (4) be published or written in English. Finally, for the meta-analysis, studies were eligible only when they included data necessary to calculate effect sizes (e.g., outcome means and standard deviations, or proportions). Excluded were intervention studies that included no control/comparison conditions, made no reference to the gang involvement of participants, or only included outcomes at the neighborhood or community level. Overall, 38 controlled evaluations described in 36 papers met criteria for our descriptive review; of these, only 26 evaluations met criteria for our meta-analytic review.

12.2.3 Coding of Studies

For descriptive purposes, the following variables were coded for each study: predominant age level of participants (children, adolescents, or adults), predominant gender, predominant ethnicity (Black, Hispanic/Latino, White, Indigenous, minority, or not reported), country of origin (US vs. other), publication status (published vs. unpublished), whether

the study was primarily prevention-oriented or treatment-oriented (i.e., focused more on prevention or rather remediating antisocial behavior and/or gang involvement), and study design (retrospective quasi-experimental, prospective quasi-experimental, or randomized trial).

12.2.4 Effect Size Estimation

The effect size statistic represents the standardized difference in outcomes between a treatment and comparison group at posttreatment or follow-up. For continuous variables, comparisons were calculated using the standardized mean difference statistic (d), with the pooled standard deviation as the denominator. For dichotomous variables (e.g., arrest or gang membership status), the log odds ratio was calculated then converted to d to create a common effect size index. A positive effect size indicates that the intervention is more beneficial than control, whereas a negative effect size indicates that control is more beneficial.

To avoid violating assumptions of statistical independence, only one effect size per study was included in any particular analysis (Lipsey and Wilson 2001). When multiple indices measured a particular outcome within a study (which occurred in the majority of studies), similar constructs were averaged to form a single effect size coefficient (e.g., if number of juvenile offenses and arrest rate were both recorded within a study, these were averaged to form a composite "antisocial behavior" effect size). To avoid problems related to combining conceptually distinct constructs (Borenstein et al. 2009), we presented outcomes separately for antisocial behavior and gang involvement.

12.2.5 Analysis

Because studies varied in terms of participant demographics, intervention characteristics, and setting features, heterogeneity of effects was expected. A random effects model was chosen for effect size analysis since this approach assumes that true effects vary systematically across studies (Borenstein et al. 2009).

The Q statistic (Hedges and Olkin 1985) was calculated to test for homogeneity of effects across studies. A significant Q statistic indicates a heterogeneous distribution and suggests that study characteristics, rather than sampling error, explain differences between studies. However, given that Q may be poor at detecting true heterogeneity when sample sizes are small, the I^2 index was also reported (Borenstein et al. 2009; Higgins et al. 2003). I^2 is the percentage of total variation across studies due to heterogeneity (versus chance), and is considered an index of *inconsistency* across study results. According to Higgins et al. (2003), an I^2 value of 25% represents low heterogeneity, 50% moderate heterogeneity, and 75% high heterogeneity.

12.3 Characteristics of the Studies

The 38 controlled gang-focused evaluations included in this review are briefly summarized in Table 12.1. Thirty-four percent were randomized trials, 40% prospective quasi-experimental, and 26% retrospective quasi-experimental. Forty percent of the evaluations were reported in published journal articles, while 8% were included in chapters or books, 8% in unpublished dissertations, and 45% in reports (published or unpublished). Thirty-seven percent were prevention-oriented trials whereas 63% were treatment-oriented.

More than half of the studies included predominantly adolescents (58%), 29% children under 13, and 13% adults. Males were the majority in most studies (84%), females predominated in 8%, males and females were equally represented in 5%, and 3% did not report gender. Hispanics were the majority in 26% of studies, African Americans in 21%, indigenous groups in 8%, Whites/Caucasians in 13%, and diverse or unspecified ethnic minorities in 26%; 5% of studies did not indicate the ethnicity of participants. Most studies were conducted in the United States (92%), with the remainder based in Canada. Thus, despite evidence that European gang involvement has pernicious effects on antisocial behavior (Klein et al. 2006), as yet no gang intervention evaluations have emerged from Europe.

12.4 Results

Two methods were utilized to determine whether gang interventions are effective overall. First, we used a "vote counting" approach (Borenstein et al. 2009) by simply summing the number of controlled gang evaluations that reported *any* significant positive effects and comparing this with the number reporting nonsignificant effects. Figure 12.1 shows the proportion of studies reporting positive or null effects for our two target outcomes. Approximately 42% of studies reported positive effects for antisocial behavior, whereas a somewhat larger percentage (45%) reported null or *negative* effects; the remainder did not assess antisocial behavior. For gang-related outcomes, only 21% reported positive effects whereas 42% reported null effects; 37% did not assess gang-related outcomes.

Figure 12.2 presents results only from the 19 studies that evaluated both antisocial behavior and gang outcomes. This figure shows that 21% of studies found significant, positive effects for *both* outcomes. Approximately 32% of studies found positive effects for antisocial behavior but not gang outcomes, whereas 10% reported positive effects for gang outcomes but not antisocial behavior. The largest block of trials (37%) showed significant effects for neither outcome.

However, this vote counting approach has several limitations (Borenstein et al. 2009). First, many studies in this review had fairly small sample sizes (e.g., under 50 per condition), with low power to detect significant intervention effects. For this reason, the large number of "null effect" studies may partly result from the preva-

Table 12.1 Summary of controlled gang intervention trials

Study	Sample	Intervention	Intervention Effects
Abreton and McClahan (2005). Prevention site	589 Youth in gang communities. Mostly male, African American	Targeted gang prevention through Boy/Girls Club of America	<i>Antisocial:</i> No. <i>Gang:</i> No
Abreton and McClahan (2005). Intervention site	175 Predominantly "high-risk" teens. Mostly male, ethnic minorities	Targeted gang intervention through Boy/Girls Club of America	<i>Antisocial:</i> No. <i>Gang:</i> No
Agopian (1990)	158 Adult, gang offenders. Mostly male and Black	Intensive supervision probation	<i>Antisocial:</i> Yes, but negative. <i>Gang:</i> Not assessed
Braga et al. (2009)	417 Adult inmates. All male and mostly non-White	Boston Reentry Initiative Intervention	<i>Antisocial:</i> Yes. <i>Gang:</i> Not assessed
Cohen et al. (1995)	528 Youth (inclusion criteria unclear). Mostly male and minority	Youth gang drug prevention program	<i>Antisocial:</i> Not assessed. <i>Gang:</i> No
Di Placido et al. (2006)	160 Adult, gang and nongang incarcerated offenders. All male, mostly Canadian aboriginal	High intensity cognitive-behavioral program	<i>Antisocial:</i> Yes. <i>Gang:</i> Not assessed
Dole (2005)	20 Aggressive/violent high school students. ½ male, mostly minority	Balance program (a social skills intervention)	<i>Antisocial:</i> No. <i>Gang:</i> No
Esbensen and Osgood (1999) [GREAT study #1]	5935 eighth graders. ½ male and mostly ethnic minorities	Gang Resistance Education and Training (GREAT) life skills prevention	<i>Antisocial:</i> Yes, positive. <i>Gang:</i> No
Esbensen et al. (2001) [GREAT study #2]	3568 Seventh graders. Gender and ethnicity not reported	GREAT life skills prevention	<i>Antisocial:</i> Yes, positive. <i>Gang:</i> No
Esbensen et al. (2012), Esbensen et al. (2013) [GREAT study #3]	3820 Sixth and seventh grade students. ½ male and mostly ethnic minority	GREAT life skills gang prevention	<i>Antisocial:</i> No. <i>Gang:</i> Yes, positive
Garcia (2002)	26 High school reservation youth. All male and mostly Pima-Maricopa Indian	Values-based career intervention	<i>Antisocial:</i> Not assessed. <i>Gang:</i> No
Godley and Velasquez (1998)	1318 Elementary school students. ½ male and mostly ethnic minority	Logan Square school and community-based substance use and gang prevention	<i>Antisocial:</i> Not assessed. <i>Gang:</i> Yes, positive

(continued)

Table 12.1 (continued)

Study	Sample	Intervention	Intervention Effects
Gold and Mattick (1974)	515 Gang youth in high crime neighborhood. All male and predominantly Black	Chicago Youth Development Project's Boys Club	<i>Antisocial</i> : No (but no significance tests reported). <i>Gang</i> : Not assessed
Goldstein and Glick (1994)	55 Gang members from "youth care agencies." Age, gender, and ethnicity not reported	Aggression Replacement Training (ART)	<i>Antisocial</i> : Yes, positive. <i>Gang</i> : Not assessed
Harrell et al. (1999)	668 At-risk youth from "distressed" neighborhoods. Mostly male and Black	Children At Risk (CAR) delinquency and drug prevention program	<i>Antisocial</i> : Yes, positive. <i>Gang</i> : No
Huey Jr et al. (2014) [and McDaniel (2011)]	27 Adolescent gang offenders from probation camps. Mostly male and Latino	Behavioral Employment Program (BEP)	<i>Antisocial</i> : Yes, positive. <i>Gang</i> : No
Josi and Sechrest (1999)	230 Young CYA adults, primarily gang involved. Mostly male and minority	Lifeskills'95 parole reentry program	<i>Antisocial</i> : Yes, positive. <i>Gang</i> : Yes, positive
Miller (1962)	377 Gang-involved youth and young adults. Mostly white and male	Midcity Project "total community" intervention	<i>Antisocial</i> : No. <i>Gang</i> : Not assessed
Peters (1996), Mobile, AL	374 Nonviolent adjudicated teens. Mostly African American, all male	Environmental Youth Corps (EYC) military-style boot camp intervention	<i>Antisocial</i> : No. <i>Gang</i> : Not assessed
Reckless and Dinitz (1972)	1094 Seventh grade males rated as "possible" or "likely" to become delinquent and not finish school. Mostly White and involved in "gang fights"	Enhanced classroom curriculum with role-model supplement	<i>Antisocial</i> : No (but no significance tests reported). <i>Gang</i> : No (but no significance tests reported)
Rodriguez (1997)	36 Fifth grade "gang leaders." Mostly male and "Mexican"	Feeder-Stream Program focused on decision-making	<i>Antisocial</i> : Not assessed. <i>Gang</i> : Yes, positive
Schlossman and Sedlak (1983)	Juvenile parolees, mostly Polish. Sample size, age, and gender not reported	Chicago Area Project (CAP) intensive support intervention	<i>Antisocial</i> : Yes, positive (but no significance tests reported). <i>Gang</i> : Not assessed

(continued)

Table 12.1 (continued)

Study	Sample	Intervention	Intervention Effects
Spergel et al. (2003), Chicago, Little Village	493 Violent gang-involved adolescents and young adults. Mostly male and Latino	Comprehensive Community-Wide Approach to Gang Prevention, Intervention, and Suppression Program (i.e., Comprehensive Gang Program Model)	<i>Antisocial</i> : Yes, positive. <i>Gang</i> : Not assessed
Spergel et al. (2005a), Bloomington-Normal	180 Probation/school-referred adolescents and young adults. Mostly male, African American, and gang-involved	Comprehensive Gang Program Model	<i>Antisocial</i> : No. <i>Gang</i> : Yes, positive
Spergel et al. (2005b), Mesa	354 School and court-referred adolescents and young adults. Mostly male, Latino, and gang-involved	Comprehensive Gang Program Model	<i>Antisocial</i> : Yes, positive. <i>Gang</i> : No
Spergel et al. (2005c), Riverside	369 Adolescents, mostly gang members and affiliates. Mostly male and Mexican-American	Comprehensive Gang Program Model	<i>Antisocial</i> : Yes, positive as well as negative. <i>Gang</i> : No
Spergel et al. (2005d), San Antonio	230 Mostly adolescent, gang members. Mostly male and Mexican-American	Comprehensive Gang Program Model	<i>Antisocial</i> : No. <i>Gang</i> : No
Spergel et al. (2005e), Tucson	Mostly adolescent, gang members. Mostly male and Mexican-American	Comprehensive Gang Program Model	<i>Antisocial</i> : No. <i>Gang</i> : No.
Thompson and Jason (1988)	117 Eighth graders at risk for gang involvement. Mostly male, but ethnicity unclear	Broader Urban Involvement and Leadership Development (BUILD) anti-gang workshops	<i>Antisocial</i> : Not assessed. <i>Gang</i> : No
Totten and Dunn (2011)	128 Young adults, all current or past gang members or affiliates. Mostly male and Canadian aboriginal	Regina Anti-Gang Services (RAGS) intervention	<i>Antisocial</i> : Yes, positive. <i>Gang</i> : Yes, positive
Tremblay et al. (1996)	166 7-year olds showing disruptive behavior in school. All male and White French Canadian	Montreal Prevention Intervention	<i>Antisocial</i> : Yes, positive. <i>Gang</i> : Yes, positive

(continued)

Table 12.1 (continued)

Study	Sample	Intervention	Intervention Effects
Valdez et al. (2013)	200 Adolescents, all gang-affiliated and alcohol/drug users. Mostly male, all Mexican-American	Brief Strategic Family Therapy (BSFT)	<i>Antisocial</i> : Yes, positive. <i>Gang</i> : No
Wiebush et al. (2005), Denver	150 Incarcerated juvenile offenders. All male, mostly ethnic minorities	Intensive Aftercare Program (IAP)	<i>Antisocial</i> : Yes, but negative. <i>Gang</i> : Not assessed
Wiebush et al. (2005), Las Vegas	247 Incarcerated juvenile offenders, mostly gang members. All male, mostly ethnic minorities	IAP	<i>Antisocial</i> : Yes, but negative. <i>Gang</i> : Not assessed
Wiebush et al. (2005), Norfolk	118 Incarcerated juvenile offenders. All male, mostly African-American	Intensive Parole Program (IPP)	<i>Antisocial</i> : Yes, but negative. <i>Gang</i> : Not assessed
Williams et al. (2012)	122 Adolescents, all "pre-gang" or gang-involved. All female, mostly Latina	Movimiento Ascendencia intervention program	<i>Antisocial</i> : Yes, positive. <i>Gang</i> : Not assessed
Willman and Snortum (1982)	200 Adolescents and young adults, all gang members and chronic offenders. All male, mostly Hispanic	Police employment intervention	<i>Antisocial</i> : No. <i>Gang</i> : Not assessed
Wodarski et al. (1979)	60 Sixth and eighth grade students with social/academic problems. Mostly male and White	Preparation through Responsive Educational Program (PREP)	<i>Antisocial</i> : Yes, positive. <i>Gang</i> : Yes, positive

sample studies (e.g., $n=20$ for Dole 2005) to have the same weight as large sample studies (e.g., $n=5935$ for Esbensen and Osgood 1999), which effectively gives "low precision" results undue influence in narrative reviews (Borenstein et al. 2009). Third, given the way we operationalized "positive effects" (i.e., any significant effects favoring the intervention, in the absence of negative outcomes), those studies assessing only a few outcomes were disadvantaged over those assessing many outcomes. In other words, studies that included many outcome variables had more opportunities to show positive results than those with only a few. Fourth, vote counting approaches reveal nothing about the *magnitude* of intervention effects, and thus little can be said as yet about the clinical or social significance of gang-focused interventions.

To address these limitations, we next present results from our meta-analytic synthesis of the literature, with effect sizes derived from 26 studies. Random effects analysis showed that overall effects for antisocial behavior were small and nonsignificant, $d=.07$, $p=.20$. Effect sizes for antisocial behavior ranged from

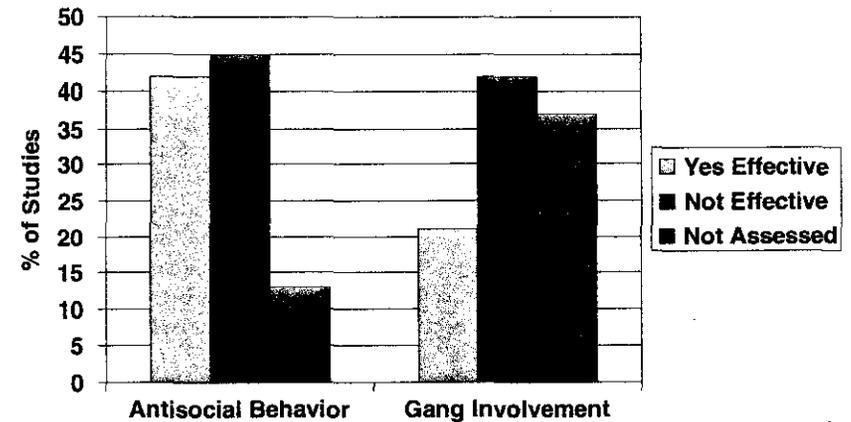


Fig. 12.1 Percentage of trials showing positive or null effects for antisocial behavior and/or gang involvement

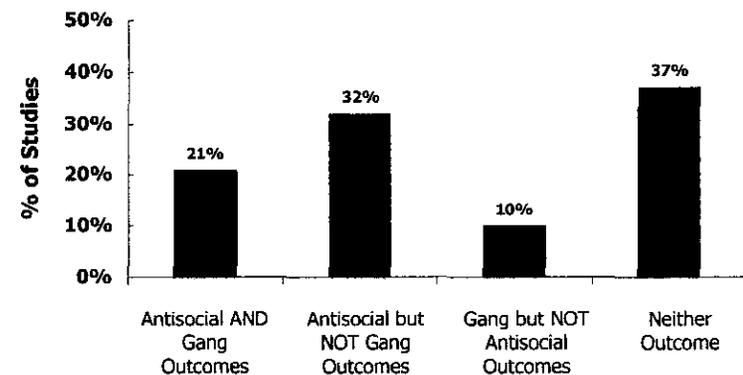


Fig. 12.2 Percentage of trials (out of 19) showing positive effects for antisocial behavior and/or gang outcomes

-.33 to 1.09 across studies, and subsequent analyses showed significant heterogeneity across studies, $Q(16)=29.67$, $p=.02$, $I^2=46.08\%$. Analyses for gang involvement showed statistically significant effects of small magnitude, $d=.29$, $p=.03$. Moreover, there was substantial heterogeneity among studies (ES range = -.29 to 1.95), $Q(15)=96.11$, $p=.00$, $I^2=84.39\%$, suggesting that additional factors could significantly moderate the effects of intervention on gang involvement. This possibility will be addressed in future studies.

12.5 Challenges and Limitations

The evidence thus far presents a mixed picture of the effects of gang-focused interventions on antisocial behavior and gang involvement. On the one hand, the majority of studies showed some efficacy in preventing/remediating antisocial behavior, gang involvement, or both (Table 12.1, Fig. 12.2). On the other hand, effect size coefficients indicated that these interventions had no overall effect on antisocial behavior, and only a small effect on gang involvement. However, methodological limitations in the current literature argue for caution when interpreting these findings. We briefly identify three of these methodological challenges below.

Gang involvement and antisocial behavior are often not assessed in the same study. Consistent with the “facilitation” perspective (Thornberry et al. 2003), an implicit assumption in the literature is that gang involvement is a causal contributor to problem behavior; thus interventions that reduce gang involvement should lead to decreases in antisocial behavior. However, because only half of the 38 studies assessed both antisocial behavior and gang involvement as intervention outcomes (Fig. 12.2), a test of this mediating process was not possible in many studies.

The omission of gang-related data is perhaps the most significant challenge in this literature. Many studies assessed gang involvement at baseline to identify those with gang ties, but did not conduct follow-up evaluations to determine how intervention actually affected gang affiliation (e.g., Di Placido et al. 2006; Wiebush et al. 2005). Curiously, a handful of interventions that were clearly identified as gang prevention or remediation programs nonetheless failed to examine gang outcomes (e.g., Williams et al. 2012; Willman and Snortum 1982). For example, Willman and Snortum (1982) evaluated an employment program for 200 predominantly Hispanic gang members, with experimental youth compared to a matched control group. Although the authors theorized that their employment intervention might work by reducing gang cohesiveness, they were unable to test this hypothesis because gang outcomes were not assessed at posttreatment. Indeed, none of the studies included in this review evaluated whether changes in gang involvement were functionally linked to reductions in antisocial behavior.

There is little uniformity in the assessment of gang involvement. Beyond the question of *whether* gang involvement is assessed are concerns about the lack of consistency across studies or investigators in *how* gang involvement is measured. In the selected studies, gang involvement was derived from one of three sources: (1) archived gang membership databases operated by law enforcement, schools, or other agencies, (2) police-defined gang arrests, or (3) participant self-report. By far, the most common approach was self-report, which characterized 88% of studies that included gang outcomes. Yet, even among self-report studies, there was enormous diversity in gang assessment, with measures ranging from standardized gang involvement scales, to idiosyncratic gang items (e.g., “are you currently a member of a gang?” “are you now in a gang?”), to unspecified gang items. Indeed, measurement variation was so great that in no instance did we find overlap across investigators in how gang involvement was measured.

This lack of measurement consistency is a concern primarily because comparing across studies is difficult given that meanings of gang involvement can vary dramatically depending on methodology (Esbensen et al. 2001). Indeed, in one of the few studies to use multiple measures, Huey Jr et al. (2014) showed differential outcomes depending on the measure utilized. Based on results from a small pilot trial, they found that gang youth randomized to the Behavioral Employment Program (BEP) showed marginally significant reductions in gang membership (based on the Gang Membership Inventory) compared to controls, but no treatment effects were found for two other indices of gang involvement (Huey Jr et al. 2014).

Effect size data is often missing. A final concern is that many studies did not provide sufficient data for effect size estimation. In most meta-analyses, effect size statistics are estimated using post-intervention proportions (e.g., % arrested; % who are gang members) or means and standard deviations (e.g., average “gang behavior” rating; average self-report of delinquent behavior). Unfortunately, only 82% of the studies in this review included data necessary to determine effect size; moreover, 45% of these studies were missing effect size data for some variables but not for others. Given that the majority of studies (55%) were missing effect size data for at least some key variables, the preliminary findings reported here should be interpreted with caution. For papers published or completed within the past 10 years, we are currently contacting authors to request data necessary for complete effect size estimation.

12.6 Model Gang Intervention Evaluations

Despite the challenges noted above, we did identify several research programs that should serve as models for how to conduct gang intervention evaluation. Below we briefly summarize findings from three of these programs. Although the design features of these studies were quite good, notably the intervention effects across each program were mixed.

GREAT. The Gang Resistance Education and Training (GREAT) program stands out from other gang intervention programs for several reasons. First, it was tested in three evaluations of increasing rigor by Esbensen and colleagues (Esbensen and Osgood 1999; Esbensen et al. 2001, 2012, 2013). Second, GREAT was substantially adapted in successive trials to respond to unfavorable findings from earlier studies (e.g., no treatment effects for gang membership), as well as critiques concerning the theoretical underpinnings of the original program (e.g., GREAT was modeled after DARE, a failed drug prevention program; Esbensen et al. 2013). Third, gang involvement and antisocial behavior were measured identically for each study, allowing for comparison of outcome effects across trials.

The original GREAT consisted of 9 weekly lessons taught to seventh grade students by uniformed law enforcement officials. The lessons contained didactic components (e.g., learning about crime and its effects on victims) and skills-focused instruction (e.g., role play of conflict resolution strategies) designed to

equip students with the skills to resist peer pressure to join a gang. The first evaluation by Esbensen and Osgood (1999) was quasi-experimental and cross-sectional, and examined posttreatment outcomes for almost 6000 students in 42 schools over 11 cities. This evaluation yielded positive treatment effects for 16 of 33 outcomes, including drug use and minor offenses; notably, there were no significant effects for gang membership.¹

The second evaluation of GREAT (Esbensen et al. 2001) was also quasi-experimental, but improved upon the first by using a longitudinal design. The sample included over 3500 sixth and seventh grade students in 22 schools located in six cities across the United States, and outcomes were assessed repeatedly over 4 years. Comparisons between the treatment group and control group yielded positive treatment effects for five of 32 outcomes. An analysis of program effects over the posttreatment period yielded positive trends for program participants compared to controls for four of 32 outcomes, including person-related self-reported delinquency and property-related self-reported delinquency. However, no significant program effects were observed for gang membership.

Given the program limitations revealed in these evaluations, GREAT was revised and modeled after two well-regarded and effective school-based prevention programs (Life Skills Training and the Seattle Social Development Model). Moreover, the curriculum was updated to reflect a renewed focus on risk factors that research had demonstrated to be important for gang affiliation. Evaluation of the revised GREAT program (Esbensen et al. 2013) utilized a randomized controlled trial (classrooms were randomized to GREAT or control) with a sample of almost 4000 youth in 31 schools across seven US cities. At 1-year follow-up, 12 of 33 outcomes showed significant treatment effects, including association with delinquent peers and gang membership. At 4-year follow-up, 10 of 33 outcomes showed significant treatment effects, including gang membership.

Although significant intervention effects were found in each of the GREAT evaluations, effect sizes were consistently small in magnitude. Thus, the effectiveness of GREAT as a clinically meaningful approach to preventing gang involvement and anti-social behavior is debatable. However, because the replications and design improvements across trials are unusual in the gang intervention literature, this series of studies deserves special attention as a model for gang intervention design and evaluation.

The Spergel Comprehensive Model. Spergel's Comprehensive Community-wide Gang Program Model is perhaps the most cited example of effective, community-based gang intervention in the United States. Controlled evaluations were conducted at six sites across the United States between 1992 and 2000, with outcomes focused primarily on gang and antisocial behavior (Spergel et al. 2003, Spergel et al. 2005a, b, c, d, e, 2006). At each site, the program partnered with local organizations and law enforcement to implement violence and delinquency intervention strategies through intensive contacts with gang youth.

¹ This null effect on gang membership is based on Esbensen and Osgood's (1999) "full" sample analysis. When the authors restricted analysis to schools with more balanced samples, GREAT was significantly more effective at reducing self-report of "ever" being in a gang (Esbensen and Osgood, 1999).

The program used five main strategies, focusing primarily on suppression, and to a lesser extent, social intervention (outreach and crisis intervention), social opportunities provision, community mobilization, and organizational change and development. The overarching model was guided by social disorganization theory, and the program relied heavily on support from local government and law enforcement (including police, parole, probation, and district attorneys) and youth outreach teams, which included influential former gang members.

The Comprehensive Model was implemented in six US cities (Chicago, Mesa, Riverside, Bloomington/Normal, San Antonio, and Tucson), which represented a range of small, medium, and large cities, with gang problems of different severities. Across sites, program and comparison samples were matched as closely as possible by arrest records, demographics, gender, and gang involvement.

The original program was implemented in a community in Chicago (Little Village), and became the prototype for the five demonstration projects that followed. Nearly all participating youth ($n=195$) were Mexican and Mexican-American, and all identified as gang members at project initiation. By the end of the 4.5-year evaluation period, program youth at the Chicago site showed significantly greater reductions in violent arrests and drug arrests than two matched comparison samples (Spergel et al. 2003). There were no significant intervention effects for total arrests or property arrests, and gang membership outcomes were not assessed.

However, Table 12.1 shows that program effects across the five replication sites were mixed. One site (Mesa) showed positive program effects on recidivism (based on arrest rates) compared to control groups, three sites (Bloomington, San Antonio, Tucson) reported no significant program effects, and one site (Riverside) reported a mix of positive and negative effects (i.e., the program was effective at reducing serious violence arrests, but program youth were more likely than controls to be re-arrested for drug offenses). Thus, when considering the overall pattern of results, the best conclusion is that the Comprehensive Model is a promising approach with inconsistent effects.

Despite these modest outcomes, there are several features of this approach that deserve further mention. First, of the 28 programs summarized here, the Comprehensive Model is the only approach that attempts to integrate prevention, rehabilitation, and suppression activities to address the multiple factors that contribute to gang violence. Given the complexities of gang membership and violence in the United States, comprehensive approaches such as this may have more promise for addressing the gang problem across a wide variety of community settings. Second, because program implementation data were collected across all intervention sites, the investigators were able to assess the potential role of intervention fidelity with regard to program outcomes. One important discovery was that implementation failure appeared to be partly responsible for poor program effects at the unsuccessful sites (Spergel et al. 2006). Finally, although the cross-agency partnerships fostered by investigators were not sustained in the long-term, this program shows that it is possible to get competing social agencies, community groups, and law enforcement to collaborate in service of gang prevention and intervention efforts (Spergel et al. 2006).

BSFT. Despite evidence linking family-level risk to gang initiation and violence, only one controlled study has evaluated the effects of family-focused intervention on gang-related outcomes. Valdez et al. (2013) tested the efficacy of adapted Brief Strategic Family Therapy (BSFT) for gang-affiliated Mexican American youth and their families. BSFT is a 12–16 session, family-based treatment that focuses on identifying and changing maladaptive family interaction patterns, particularly those related to youth problem behaviors. Moreover, 3 hours of “gang diversion training” was incorporated into BSFT by raising the consciousness of parents to gang life and orienting parents to gang-diversion strategies.

Valdez et al. (2013) randomly assigned 200 gang-affiliated (i.e., self, friend, or family members in a gang), drug/alcohol using adolescents to adapted BSFT or control (i.e., referred to behavioral health or substance abuse services). At the 6-month follow-up, they found that adapted BSFT led to significantly greater reductions in parent-reported conduct problems than control. Also, marginal treatment effects were found for parent-rated hyperactivity and impulsivity, with BSFT showing stronger effects. Although gang-related adaptations were made to the core intervention, BSFT had no effect on gang affiliation.

This study has at least two key advantages over most gang intervention evaluations. First, Valdez et al. (2013) adopted and modified a well-validated intervention for reducing conduct problems (Szapocznik et al. 2012), and thus were able to avoid the costs, inefficiencies, and uncertainties of developing a gang intervention from scratch. Second, the study had several methodological strengths, including random assignment of youth/families to treatment conditions, fidelity monitoring to ensure provider adherence to the treatment model, use of a reliable gang affiliation outcome measure, and intent-to-treat analyses to address biases due to participant attrition. Thus, there is greater confidence that treatment effects were attributable to the intervention itself rather than to extraneous factors.

12.7 Discussion

Overall, this brief review offers a mixed view of the efficacy of interventions for preventing gang membership, reducing gang involvement, or addressing problem behavior in gang-involved individuals. Our “vote counting” approach suggested that antisocial behavior might be somewhat more amenable to intervention efforts than gang involvement (i.e., 42% of studies found positive effects for antisocial behavior whereas 21% found positive effects for gang involvement); however, our meta-analysis shows that these interventions may have modest effects on gang involvement, while having minimal impact on antisocial behavior. Challenges to synthesizing this literature include inconsistency in defining gang membership across studies and insufficient data available in many studies to calculate effect sizes. Future analyses will investigate potential moderators of intervention effects, such as ethnicity and intervention type.

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[*References marked with an asterisk indicate studies included in the meta-analysis.]

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Gang Transitions and Transformations in an International Context

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*We dedicate this volume to all of our
colleagues who have contributed
to the Eurogang Program to enhance
our understanding of youth gangs
and of the policies and programs
that might reduce the negative consequences
of these troublesome youth groups
for our communities and families
and other gang members.*

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