WHAT WORKS IN REDUCING COMMUNITY VIOLENCE:

A META-REVIEW AND FIELD STUDY FOR THE NORTHERN TRIANGLE

FEBRUARY 2016

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ABSTRACT[1]

This report was commissioned by the U.S. Agency for International Development (USAID) for the Central America Regional Security Initiative (CARSI), a United States government effort primarily executed by both USAID and the U.S. Department of State Bureau of International Narcotics and Law Enforcement Affairs (INL). In preparation for this report, we performed a systematic meta-review of 43 reviews, including over 1,400 studies, to identify what works in reducing community violence. In addition, we supplemented our findings with fieldwork in El Salvador, Guatemala, Honduras, and the United States, visiting over 20 sites and conducting over 50 semi-structured interviews.

We found that a few interventions, such as focused deterrence and cognitive behavioral therapy, exhibited moderate to strong effects on crime and violence and were supported by substantial evidence. A few others, such as scared straight and gun buyback programs, clearly demonstrated no or negative effects. The vast majority of programmatic interventions, however, exhibited weak or modest effects. We identified six "elements of effectiveness" shared by the most impactful interventions, including maintaining a specific focus on those most at risk for violence; proactive efforts to prevent violence before it occurs whenever possible; increasing the perceived and actual legitimacy of strategies and institutions; careful attention to program implementation and fidelity; a well-defined and understood theory of change; and active engagement and partnership with critical stakeholders.

Given the modest effects of most interventions, that violence generally clusters around a small number of places, people, and behaviors, and that violence is not displaced from those clusters when they are targeted, we reach the simple yet powerful conclusion that it is advisable to concentrate and coordinate anti-violence efforts where they matter most. We further conclude that increased attention to program implementation and evaluation is necessary. We close with four recommendations to governmental and non-governmental funders with regard to community violence in the Northern Triangle and globally.

INTRODUCTION

Latin America has the unfortunate distinction of being the most violent, murderous region in the world, accounting for 9% of the world's population but 33% of its homicides (Jaitman et al., 2015). The countries of the Northern Triangle – El Salvador, Guatemala, and Honduras – are among the most violent in the region. Violence, particularly lethal violence, imposes enormous social and economic burdens on the region. In the Northern Triangle, the costs are truly staggering, with one studying estimating the economic costs of violence for El Salvador, Guatemala, and Honduras at 7.5%, 5.4%, and 7.2% of gross domestic product respectively (Jaitman et al., 2015). With an average homicide rate of 51 per 100,000 inhabits per year (Igarape, 2015), the Northern Triangle is in the midst of a violence epidemic according to international standards.

Despite the overwhelming urgency of the issue, the phenomenon of violence remains poorly understood in the Northern Triangle. The problem is not simply a lack of knowledge – although major gaps remain – it is that current knowledge, particularly evidence derived from rigorous research and evaluations– is not accessible to policymakers in the region in a readily usable and understandable format.

In this systematic meta-review, we summarize and analyze evidence concerning a vast array of programmatic interventions in order to better inform policies to reduce violence in the region. Specifically, this report is based on three research components:

1. A systematic meta-review, or review of reviews, of systematic reviews and meta-analyses considering causal evidence relating to violence reduction;[2]
2. A supplemental review considering materials beyond the scope of the meta-review in order to enhance and provide further context for its findings; and
3. A field study employing semi-structured interviews and site visits to offer additional guidance regarding implementation and adaptation.[3]

This report may be the first of its kind – "To date, no meta-reviews have included the full range of programs that are intended to prevent youth violence; additionally, no meta-reviews have used both quantitative and qualitative approaches" (Matjasko et al., 2012).[4] Our goal is provide policy recommendations informed by rigorous evidence but grounded in the practical realities of implementation in real-world settings.

EVIDENCE-INFORMED POLICY

Evidence-informed policy, meaning policy informed by the best evidence and data currently available, has many advantages. The effective use of evidence and data enhances the accuracy, reliability, objectivity, consistency, and transparency of public decision-making. We avoid the more popular term "evidence-based" deliberately, however, as a reminder that public policy can never be based exclusively on science. Evidence and data should be used to improve policy, not replace it entirely (Robinson & Abt, 2016).

In the U.S., both the supply and demand for evidence and data related to crime and violence has increased dramatically in recent years. In Latin America, however, and particularly in the Northern Triangle, the evidence-informed movement is still in its infancy. This report examines causal evidence, little of which exists outside high-income nations. This means that in many instances the recommendations of this report rely on evidence produced in settings quite different from those of the Northern Triangle. It is important to be mindful that in order "to provide effective policy, causal effects must be understood within a larger organizational, political, and social structure" (Sampson, Winship, & Knight, 2013). In this report we identify evidence-informed interventions and strategies, primarily from the U.S., that are worth exploring in the very different contexts of the Northern Triangle. This process of exploration should involve a careful, thoughtful, and inclusive process of adaptation and experimentation with the active participation of local stakeholders.

Our focus on causal evidence also creates a strong bias towards the programmatic interventions that are capable of generating such evidence. Evaluating institutions or systems is a much more

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[2] Causal evidence is evidence that identifies a causal relationship between an intervention and its intended effect, and is typically generated by evaluations featuring an experimental or quasi-experimental research design.
[3] Protocols for the systematic meta-review and field study are provided in Annex B and D respectively.
[4] Internal citations and quotations are omitted throughout this report.

complicated exercise where establishing causality may be difficult or even impossible. For this reason, only programmatic evaluations and evidence are discussed here, but it should be remembered that this is only one of several important policy areas concerning crime and violence reduction. For instance, as Manual Eisner (2015) recently argued, "An effective rule of law, based on legitimate law enforcement, victim protection, swift and fair adjudication, moderate punishment, and humane prisons is critical to sustainable reductions in lethal violence."

Our focus on causal evidence is intended to provide us with the most reliable, current evidence of what works to reduce violence, but this does not mean that other evidence and information is not valuable. We simply believe that a better understanding of causal evidence, albeit mostly from high-income counties and programmatic evaluations, can significantly enhance decision-making with regard to violence reduction in the Northern Triangle.

VIOLENCE CONTINUUM

For the purposes of this report, we adopt a narrower version of the World Health Organization (WHO) definition of violence as the intentional use of physical force or power, threatened or actual, against another person or group that results in physical injury or death (Krug et al., 2002). We further limit our examination to what we term "community violence." To understand what we mean by this, we first delineate six different dimensions of violent behavior. We then suggest that different forms of violence can be described along a rough continuum according to the associations between these dimensions.[5]
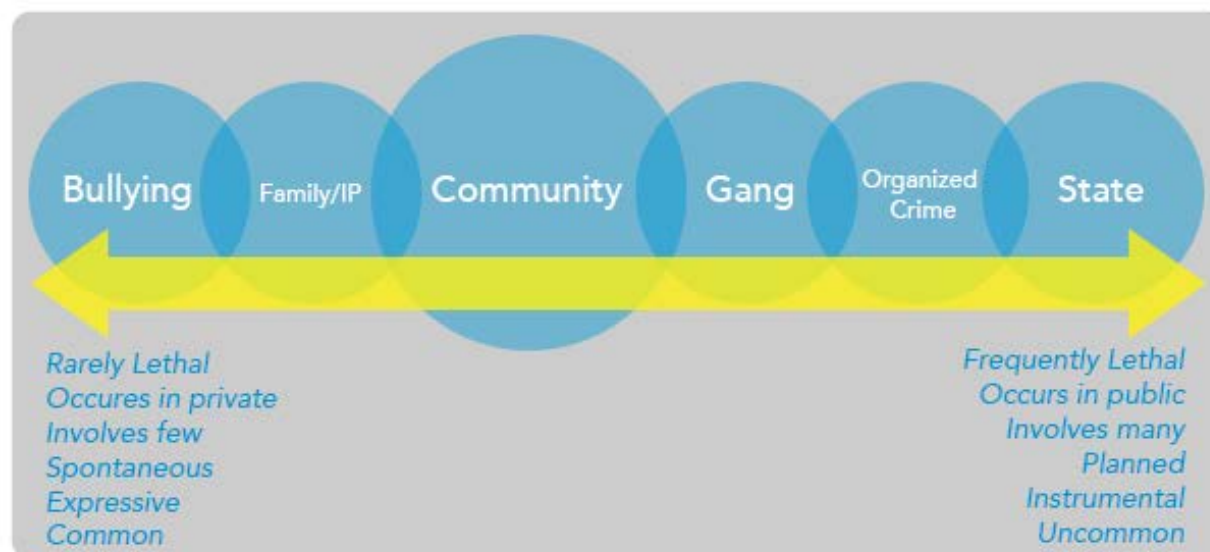
Violence comes in many forms. First, it can vary in its lethality or capacity to cause serious physical injury – a shove versus a fatal shooting. Second, it can occur in different settings – in the privacy of one's home or on a public street. Third, the number of individuals involved may be few, as with a dispute between neighbors, or many, as with conflicts among gangs. Fourth, it may be spontaneous as in a bar brawl or it may be planned as with an assassination. Fifth, it may be expressive of an emotion like anger or instrumental in pursuit of illegal economic activity. Sixth and finally, it may be as frequent as domestic violence or as infrequent as warfare.

These six dimensions are strongly, but not perfectly, associated with each other. To capture these associations we collapse them into a single dimension along a continuum as represented by Figure 1 on the next page. Obviously, this continuum is neither entirely complete nor perfectly accurate, but we believe that viewing violence along a continuum is a helpful means of understanding difference kinds of violence while avoiding overly simplistic categories.

Figure 1 includes six forms of violence: violence among children due to bullying; violence between family members and/or intimate partners; violence among and between community members; violence committed by gang members; violence committed by organized criminal groups; and violence between nation states, i.e. war. These categories are intended to be illustrative, not exhaustive. Community violence is emphasized because it is the focus of this report and because it likely accounts for the largest number of homicides (see discussion below).

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[5] The World Health Organization, United Nations, and others divide forms of violence into discrete categories (Krug et al., 2002; UNODC, 2013). These schemes are often difficult to use in practice, as violence in the real world generally fails to comply with rigid classification.

Figure 1: Continuum of Violence

At one end of the continuum, violence is interpersonal, i.e. generally occurring between individuals known to one other. It occurs frequently but is rarely fatal and unlikely to cause permanent physical injury. It is unplanned, disorganized, emotional, and impulsive in nature. This violence is traditionally a private matter, occurring between friends, schoolmates, or family members. If addressed by public institutions, it will likely involve a wide array of public health stakeholders with limited law enforcement participation, if any. Bullying exemplifies the violence at this end of the continuum.

On the other end of the continuum, violence occurs between groups, often large in size, where individuals are generally unknown to one another. Unlike bullying, this violence is infrequent but severe, often resulting in significant numbers of casualties. It is highly planned, organized, and instrumental by nature. This violence is a generally state matter and traditionally the province of law enforcement and military institutions. Formally declared conflicts between states exemplify the violence at this end of the continuum.

In the middle of this continuum lies community violence, the focus of this report. Community violence, particularly homicide, occurs primarily in public settings. It is interpersonal, taking place between individuals and small groups that may or may not know one another. It is generally unplanned and impulsive in nature but its impact is nevertheless severe, often resulting in death or disabling injury. Its perpetrators and victims are generally, but not exclusively, young men from disadvantaged backgrounds and communities. It may result from disputes or from conventional forms of street crime, e.g. robberies. Community violence implicates both the public health and public safety fields and multi-disciplinary, multi-sector responses.

Other forms of violent behavior exist on the continuum alongside community violence. Categorizations are fluid and overlap with one another. Gang violence, for instance, if it occurs for impulsive reasons involving small, disorganized groups, would also be considered community violence. If the gangs involved are larger and more organized, with the reasons for violence more instrumental in nature, this violence would likely overlap with violence caused by organized crime.

It is generally difficult to disaggregate overall rates of violence into particular categories, and this is particularly so for the countries of the Northern Triangle. The Geneva Declaration Secretariat

(2015) estimates that formal conflicts account for just 15% of all global homicides. The United Nations Office on Drugs and Crime (UNODC, 2014) estimates that 30% of all homicides in Latin America are linked to organized crime or gangs, with high and low estimates varying wildly between approximately 43% and 7% respectively. The same report estimates that across the Americas, family and intimate partner violence accounts for 8.6% of all homicides. Based on these estimates and others, we believe that community violence as defined in this report constitutes the largest single category of lethal violence, but no study has measured violence in the region in precisely these terms.

Further complicating matters, all forms of violence are interconnected. For example, a drug cartel "sicario" or assassin might shoot a public official during the day, stab a stranger during a dispute at a party later that evening, and then abuse his wife and children once he returns home, thus implicating organized criminal, community, and family violence respectively. The contagion between different forms of violence is a subject worthy of serious exploration but beyond the scope of this report.

While violence is clearly interrelated, it is equally clear that different forms of violence are best addressed by different strategies. A key component of any strategy is the number and type of partners to be mobilized. In this regard, responses to violence will differ greatly – a response to bullying may involve coalitions of educators and parents, while addressing organized criminal violence typically demands the coordination of law enforcement groups.

In the Northern Triangle, at least three forms of violence bear special mention alongside community violence: family/intimate partner, gang, and organized criminal violence. Countries in Latin America, but especially the Northern Triangle, suffer from unusually high rates of all three. El Salvador in particular is currently facing crisis levels of lethal violence, driven primarily by violence between and among its largest and most organized gangs – MS 13 and 18th Street – and the government. As discussed later, strategies addressing these forms of violence should be aligned with, but distinct from, the strategies discussed in this report.

METHODOLOGY

SYSTEMATIC META-REVIEW

SYSTEMATIC REVIEWS AND META-ANALYSES

Policymakers and practitioners need tools to make use of evidence that is voluminous, diverse, and fragmented across disciplines. For research to be relevant to policy, it must be captured and consolidated in a reliable and accessible manner.

A systematic review uses predetermined and explicit methods to identify, select, appraise, and combine the results from individual studies in a clear, unbiased, and systematic manner. A meta-analysis combines quantitative data from individual studies using established statistical techniques. Systematic reviews may or may not include meta-analyses, and meta-analyses may or may not be systematic in nature (Petrosino & Lavenberg, 2007). This report uses a particular form of systematic review called a meta-review, which is a review of other reviews.

Systematic reviews and meta-analyses are designed to overcome limits to the external validity[6] of individual studies (Killias & Villetaz, 2008). These techniques have grown popular as scholars recognize their usefulness for identifying themes and patterns across large numbers of empirical studies (Makarios & Pratt, 2012), and are being employed with increasing frequency in medicine, education, criminal justice, and many other fields (Aos et al., 2006). As Mark Lipsey noted in 1999, "Practice and policy, therefore, are best guided by a cumulation of research evidence sufficient to balance the idiosyncrasies of individual studies and support more robust conclusions than any single study can provide."[7] Ten years later, Lipsey (2009) elaborated further, "The most useful guidance for practitioners, and the most informative perspective for program developers and researchers, will not come from lists of the names of programs shown by research to have positive effects. Rather, they will come from identification of the factors that characterize the most effective programs and the general principles that characterize what works."

Wherever possible, our meta-review follows the protocols and conventions of the Campbell Collaboration, the exemplar for systematic and meta-analytical reviews in the social sciences. "Campbell reviews are intended to provide the most rigorous assessment possible of the effectiveness of studied interventions" (Koper & Mayo-Wilson 2006). The most important distinction between the methodology here and that of Campbell is the unit of analysis – the Campbell methodology compiles individual studies into a systematic review while our methodology compiles individual systematic and meta-analytic reviews into a meta-review, or review of reviews.

ELIGIBILITY CRITERIA

In order to identify eligible reviews and analyses, we applied following criteria:

1. **Reviews.** Eligible reviews were systematic reviews and/or meta-analyses that synthesized the results of multiple studies. Individual studies were excluded.
2. **Outcomes.** Eligible reviews reported on at least one or more of the following outcomes: crime, violence, victimization, recidivism, and disorder. Reviews concerning specialized types of offenders or forms of violence not directly related to community violence (e.g. mentally ill offenders, sex offenders, family/intimate partner violence) were excluded.
3. **Quality.** Eligible reviews met minimum standards for methodological quality, scoring a six or higher on the AMSTAR[8] eleven-point scale. Additionally, eligible reviews reported only on studies featuring causal evidence generated by experimental or quasi-experimental designs. Reviews with non-causal evidence from non-experimental studies were excluded.
4. **Time period.** Eligible reviews were published between January 1990 and November 2015.
5. **Geography.** Eligible reviewed were published in the Americas, the Caribbean, or Europe.
6. **Languages.** Eligible reviews were written in English and Spanish.
7. **Sources.** Both published and unpublished reviews were eligible for consideration.

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[6] Internal validity concerns the extent to which a causal conclusion based on a study is warranted. External validity concerns the extent to which the results of one study, even one with high internal validity, can be generalized to circumstances beyond the study's original setting.

[7] Not all researchers agree with this conclusion. Fagan and Catalano (2012), for instance, argue that "[m]eta-analyses, which advocate for program types or strategies, not specific interventions, have less developmental and risk and protective factor specificity; as a result, practices based on recommendations from meta-analyses may have a diminished likelihood of effectiveness when locally implemented."

[8] AMSTAR (A Measurement Tool to Assess Systematic Reviews) is a widely accepted instrument used to assess the methodological quality of systematic reviews.

SEARCH STRATEGY

We used multiple strategies to search exhaustively for reviews meeting the above-described criteria. First, keyword searches were performed on thirteen reputable English- and Spanish-language online criminal justice and public health databases. Second, hand searches of leading criminal justice and public health journals from both the United States and Latin America were performed. Third, a preliminary list of eligible studies was emailed to leading scholars knowledgeable in areas of crime and violence reduction in an effort to identify additional relevant studies. Finally, we consulted an information specialist in order to ensure that appropriate search strategies were used to identify eligible reviews, including performing a grey literature search.[9] Initial searches were performed in July 2015, with final searches performed in November 2015.

CODING STRATEGY

A graduate research assistant, in frequent consultation with Mr. Abt and Dr. Winship, coded all eligible reviews on a variety of criteria. Mr. Abt reviewed each eligible study and determined final coding decisions in consultation with Dr. Winship.

POTENTIAL THREATS TO VALIDITY

Like all research methods, systematic reviews and meta-analysis are not without their limitations. Potential criticisms include the "apples and oranges" threat of mixing dissimilar studies into a single analysis; the "file drawer" problem of selecting only published studies for analysis; and the "garbage in garbage out" challenge, where poor quality studies can compromise analysis (Hollin, 1999).

In this report, we took steps to anticipate and address all three criticisms. First, with regard to "apples and oranges," we grouped similar interventions into categories, analyzing each separately to ensure some comparability. In addition, we decided against a quantitative or meta-analysis of eligible reviews in favor of a more flexible narrative analysis. Second, we addressed the "file drawer" problem by exhaustively searching the grey literature[10] for unpublished studies. Third, to address the "garbage in garbage out" challenge, we screened each review for methodological quality and accepted only reviews with studies that relied on causal evidence generated by experimental or quasi-experimental designs.

A final threat concerns overlap in the reviews considered. More specifically, certain studies may appear in more than one review, limiting the independence of reviews and potentially confounding analysis. We believed the risk here was modest, given the variability of the eligible reviews and the flexibility of our narrative analysis, but where we believe it may have impacted our conclusions or those of the reader we discuss the issue explicitly.

RESULTS

Our search strategies yielded 5,465 distinct abstracts for review. Of those, 188 were selected for full-text examination. After examination, 43 reviews were selected according to the eligibility criteria.[11] These reviews included a total of 1,435 studies, with a mean of 34 studies per review,

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[9] We are indebted to Phyllis Schultze for her assistance.
[10] Grey literature is information or research published outside of traditional commercial or academic publishing and distribution channels.
[11] A list of the eligible reviews is provided in Annex C.

Table 1: Characteristics of Eligible Reviews

	N	%
Publication type		
Journal article/Campbell Review	36	84
Government/technical report	5	12
Dissertation/thesis	1	2
Conference paper	1	2
Total published	36	84
Total unpublished	7	16
Year of publication		
1990-1994	0	0
1995-1999	1	2
2000-2004	4	9
2005-2009	17	40
2010-2014	17	40
2015 onwards	4	9
Place of Publication		
United States	30	71
United Kingdom	6	14
Netherlands	2	5
Canada	2	5
Spain	2	5
Language		
English	43	100
Intervention Focus[A]		
Place	10	23
People	24	56
Behavior	10	23
Intervention Level[BC]		
Primary Prevention	13	30
Secondary Prevention	7	16
Tertiary Prevention	7	16
Suppression	11	26
Rehabilitation	19	44
Total Reviews	43	100

[A]One review (Fagan and Catalano, 2012) concerned studies with two areas of focus (place and people).

[B]For the sake of clarity, we separate tertiary prevention from rehabilitation strategies, as we observe that combining them frequently causes confusion among practitioners in the field.

[C]Several reviews concerned studies of interventions with multiple levels.

ranging from 3 to 200, examining 30 separate crime and violence control strategies. The mean AMSTAR rating was 9.0 on a scale from zero to eleven, indicating that most reviews were of good

quality, with all reviews receiving a score of six or higher. 16% of the eligible reviews were unpublished, indicating that the search strategy was effective in addressing the threat of publication bias. 71% of eligible reviews were published in the U.S.; disappointingly, none were published in Latin America. Finally, only 14% of all interventions were classified as either secondary or tertiary prevention strategies. The table below further describes the characteristics of the selected studies:

SUPPLEMENTAL REVIEW

In addition to eligible reviews, our searches identified a number of resources that, while not eligible for inclusion in our meta-review, were too useful to exclude entirely, including other relevant meta-reviews and important individual studies. When cited in the report, care is taken not to conflate these materials with eligible reviews, which were determinative in terms of our conclusions and recommendations. In legal terminology, the authority of supplemental materials was merely persuasive, not mandatory.

FIELD STUDY

In order to provide additional guidance regarding implementation and adaptation, we selected and visited programs in the U.S. that

were representative of leading interventions identified by the meta-review. We conducted semi-structured interviews with intervention leadership, management, staff, and participants, as such formats are recommended when individuals are interviewed only once (Bernard, 1988). In each interview, we asked subjects a standardized set of questions in order to identify the conceptual, operational, and contextual components of their intervention's effectiveness. In total, we visited 11 sites in 5 states, conducting a total of 27 semi-structured interviews.

In addition, we travelled to El Salvador, Guatemala, and Honduras in order to better appreciate the context in which our findings, conclusions, and recommendations might be applied. In each country, we conducted semi-structured interviews with representatives from local government, law enforcement, non-governmental organizations, the faith-based community, and community representatives, along with USAID and INL leadership, management, and staff. We asked subjects a similarly standardized set of questions concerning the nature and concentration of local violence and the capacity of local institutions to address such violence. In total, we visited 11 sites across three countries, conducting a total of 24 semi-structured interviews.

ANALYSIS

This report summarizes the causal evidence produced by our systematic meta-review, then supplements and enhances those findings with additional research and fieldwork that are generally non-causal and/or descriptive in nature. The benefit of this approach is that it enables us to provide guidance in the areas most lacking in the field of evidence-informed policy: synthesis, emphasis, practice, and adaptation. The risk associated with this approach is that if components are not carefully separated and remain independent from one another, it may not be clear to the reader how we reach our conclusions, and what evidence – causal, non-causal, or descriptive – we rely on. In order to eliminate (or at least mitigate) these risks, we discuss our meta-review and fieldwork findings in separate sections.

It should be noted that a formal meta-analysis of the reviews produced by the systematic review was considered but ultimately rejected. In some cases it is possible to perform a meta-analysis aggregating individual meta-analyses. In this case, the broad scope of the review, which was a significant advantage in terms of comprehensiveness, produced a large number of reviews that were highly variable in nature, with differing units of analysis, intervention delivery, comparison groups, and statistical techniques, among other dissimilarities. This made a quantitative synthesis of such reviews unreliable. Additionally, where we reach conclusions, the evidence is quite clear, minimizing the need for technical discussions concerning statistical power or to reconcile conflicting results (Koper & Mayo-Wilson 2006). In short, we agreed with others (Koper & Mayo-Wilson 2006, Gravel et al., 2012) who have decided against statistically aggregating incommensurate studies.

FINDINGS FROM THE META-REVIEW

A key conclusion of this report is that the "available empirical and theoretical evidence suggests that crime is concentrated at a small number of high-risk places during high-risk times and generated by a small number of very risky people" (Braga, 2015). Further, "Crime should be analyzed in multiple units, or categories, including offenders, criminal networks, victims, micro-places (hot spots), communities, times, days of the week, and other categories" (Sherman, 2012).

Balancing the need for both accuracy and simplicity, we categorize and discuss interventions as either place, people, or behavior-based.

Place-based interventions target the geographic locations where violence occurs, people-based interventions focus on the individuals and groups who perpetrate violence, and behavior-based interventions concentrate on behavior that may be likely to trigger violence, such as carrying firearms, selling illegal drugs, excessive consumption of alcohol, and belonging to a gang, among others. We believe a place/people/behavior-based framework is helpful to policymakers, who can quickly grasp that in order to reduce violence they must focus on where violence happens, who is involved, and how those involved are behaving.

In the tables below, we describe interventions according to the strength of the evidence supporting them, the size of their impacts, as well as their relevant outcomes, intervention level, and sources. Judgments as to the strength of the evidence were made relative to the other evidence identified in the meta-review, with an emphasis on whether and how many randomized controlled trials[12] had tested the strategy. Characterizations of intervention impact are drawn primarily from the conclusions of the review authors.

Outcomes for crime and violence are place-based in that they measure change in a specific geographic area. Outcomes for recidivism measure changes in reoffending among those subject to the intervention.

With regard to program level, primary prevention interventions reduce risk behaviors associated with violence in the general population. Secondary and tertiary prevention reduces violent behavior in those at risk for or already engaging in violence respectively. Suppression reduces violence via deterrence, generally but not exclusively using threats of arrest and incarceration. Rehabilitation interventions generally assist former offenders to reenter society after they have been adjudicated or imprisoned. These descriptions and labels are imperfect but have the benefit of being easily recognized by practitioners in the field.

PLACE-BASED APPROACHES

Our searches returned 9 eligible reviews discussing 7 discrete strategies for place-based crime and violence reduction.

Table 2: Place-Based Approaches

Intervention	Evidence	Impact	Outcomes	Level	Source(s)
Hot spots policing	Strong	Modest	Crime; violence	Suppression	Braga et al., 2012
Disorder (broken windows) policing	Strong	Modest	Crime; violence	Suppression	Braga et al., 2015; Distler, 2011

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[12] A randomized controlled trial (RCT) is a type of scientific experiment, where subjects are randomly allocated to different treatments for the purposes of comparison. RCTs are widely considered the "gold standard" for scientifically determining the effectiveness of a given treatment or intervention.

Community-oriented policing	Moderate	None	Crime; violence	Suppression	Gill et al., 2015
Urban renewal	Modest	Modest	Crime; violence	Primary prevention	Cassidy et al., 2014
CPTED	Moderate	Modest	Crime; violence	Primary prevention	Cassidy et al., 2014; Farrington et al., 2007; Farrington & Welsh, 2002; Welsh & Farrington, 2009
Neighborhood watch	Modest	Modest	Crime; violence	Primary prevention	Bennett et al., 2006
Poverty deconcentration	Modest	Moderate	Crime, violence	Primary prevention	Cassidy et al., 2014; Fagan & Catalano (2012)

Hot spots policing strategies focus on small geographic areas where crime is concentrated. Braga et al.'s Campbell review (2012), with 19 evaluations, 10 of which were randomized controlled trials, provided strong evidence of effectiveness clearly establishing two important policy points. First, focusing police efforts on micro-locations yields positive benefits. Second, when hot spots are targeted, crime is not displaced. In fact, crime and violence are more likely to decrease for those living near or adjacent to hot spots enforcement. That said, the impact of these interventions was modest, with results ranging from no change to a 33% reduction in violence. Hot spots policing also performed better when combined with problem-oriented policing.

Disorder policing, also known as broken windows policing, addresses physical and social disorder in neighborhoods in order to prevent crime and violence. With 9 of 28 studies using randomized controlled trials, Braga et al.'s Campbell review (2015) clearly established that broken windows is has modest crime control benefits. That said, certain approaches work better than others, with community and problem-oriented approaches preferred over aggressive "zero tolerance" strategies, which can create community tension and undermine collective efficacy.[13] Distler's (2012) review largely reinforced these findings, albeit with a smaller effect size.

Community policing leverages partnerships with residents and the community in order to reduce crime and disorder. Gill et al. (2015) analyzed 25 studies, only one of which was a randomized controlled trial, and found that community-oriented policing had no discernable impact on crime and violence, although it did positively affect citizen satisfaction, perceptions of disorder, and police legitimacy. These findings were consistent with those of the prestigious National Research Council (Skogan & Frydl, 2004).

Urban renewal involves the improvement of various elements of the physical environment, including but not limited to transportation, housing, lighting, and vegetation. Cassidy et al. (2014) examined five studies, only one of which featured randomized assignment. They found that urban renewal was associated with reduced crime and violence, especially in Medellín, Colombia, as well as improvements in police legitimacy and collective efficacy, but the number and quality of studies supporting this finding was limited.

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[13] Collective efficacy concerns the link between community cohesion and shared expectations for action, and is associated with reduced community violence (Sampson, 2004).

CPTED, or Crime Prevention Through Environmental Design, seeks to deter or prevent crime through manipulation of the physical environment. Three reviews examined the effects of CPTED (Cassidy et al., 2014; Farrington et al., 2007; Welsh & Farrington, 2009; Farrington & Welsh, 2002) and found only modest, if any, impacts on crime and especially violence. Additionally, certain CPTED elements can create a "fortress mentality" whereby residents withdraw behind walls, fences, and fortified homes, thereby undermining collective efficacy.

Lastly, neighborhood watch programs engage community residents to increase surveillance and prevent crime. Bennett et al. (2006) reviewed the effects of neighborhood watch but found only modest impacts on crime and violence. Cassidy et al. (2014) found stronger effects for poverty deconcentration, either by encouraging the poor to move to wealthier areas or vice versa, but their conclusions were drawn from a sample of only four studies, one of which was also cited by Fagan and Catalano (2012).

PEOPLE-BASED APPROACHES

Our searches returned 23 eligible reviews identifying 14 discrete people-based strategies to reduce crime and violence.

Table 3: People-Based Approaches

Intervention	Evidence	Impact	Outcomes	Level	Source(s)
Problem-oriented policing	Moderate	Modest	Crime; violence	Suppression	Weisburd et al., 2010
Procedural justice	Modest	Modest	Recidivism	Suppression	Mazerolle et al., 2013
Focused deterrence	Moderate	Strong	Crime; violence	Suppression; tertiary prevention	Braga & Weisburd, 2012
Cognitive behavioral therapy	Strong	Strong	Recidivism	Tertiary prevention; secondary prevention; rehabilitation	Lipsey et al., 2007; Hockenhull et al., 2012
RNR framework	Strong	Strong	Recidivism	Rehabilitation	Dowden et al., 2003; Dowden & Andrews, 2000; Garrido & Quinto, 2007; Jolliffe & Farrington, 2007; Killias & Villetaz, 2008; Lipsey, 1999; Smith et al. 2009
Vocational training	Mixed	Modest	Recidivism	Secondary prevention; primary prevention; rehabilitation	Aos et al., 2006; Visher et al., 2005

Mentoring	Modest	Modest	Recidivism	Secondary prevention; primary prevention	Joliffe & Farrington, 2007; Fagan & Catalano, 2012
School-based programs	Moderate	Mixed	Violence	Secondary prevention; primary prevention	Alford & Derzon, 2012; Fagan & Catalano, 2012
Family-based programs	Moderate	Moderate	Violence	Secondary prevention; primary prevention	Fagan & Catalano, 2012
Juvenile curfews	Moderate	None	Crime; violence	Primary prevention	Adams, 2003
Restorative justice	Moderate	Modest	Recidivism	Rehabilitation	Lattimer et al., 2005; Sherman et al., 2015
Aftercare programs	Moderate	Modest	Recidivism	Rehabilitation	James et al., 2013; Weaver & Campbell, 2015
Electronic monitoring	Strong	None	Recidivism	Rehabilitation	Aos et al., 2006; Renzema and Mayo-Wilson, 2005
Boot camp	Strong	None	Recidivism	Rehabilitation	Mitchell et al., 2007
Scared straight	Strong	Negative	Recidivism	Rehabilitation	Petrosino et al., 2013

Problem-oriented policing uses analysis to tailor police responses to specific public safety problems using the SARA (scanning, analysis, response, assessment) method. Despite widespread adoption, Weisburd et al. (2010) identified only 10 eligible studies, none of which were randomized controlled trials, showing a modest average impact on crime and violence.[14] Interestingly, problem-oriented policing appears to improve the performance of other policing strategies, such as hot spots, disorder, and community-oriented policing, and may have greater impact in a supporting rather than leading role in police strategies to reduce crime and violence.

Procedural justice seeks to improve police legitimacy and increase voluntary compliance with the law by providing greater transparency, demonstrating neutrality and trustworthiness, and showing respect for citizens, thereby increasing public confidence in the process by which policing is conducted. Mazerolle et al. (2013) reviewed 30 studies, 4 of which were randomized controlled trials, and demonstrated that such techniques enhance cooperation and satisfaction with police. Most importantly for this meta-review, they also examined 15 studies that addressed whether procedural justice impact recidivism and revictimization. Here the results were more equivocal, with a very small but statistically significant reduction in reoffending.

Focused deterrence, as demonstrated by Braga and Weisburd (2012), has the largest direct impact on crime and violence, by far, of any intervention in this report. Focused deterrence involves the identification of specific offenders and offending groups, the mobilization of a diverse group of law

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[14] Weisburd et al. also discussed 45 pre/post studies that were technically ineligible for inclusion but whose results were overwhelmingly in favor of problem-oriented policing effectiveness. Of the 45 studies, 43 reported a decline in crime or disorder, with a sizeable 44.45% decrease on average.

enforcement, social services, and community stakeholders, the framing of a response using both sanctions and rewards, and direct, repeated communication with the individuals and groups in order to stop their violent behavior. While the authors urged caution in interpreting their results due to the absence of randomized controlled trials, they reported that 9 of 10 interventions substantially reduced crime and violence, with homicide reductions ranging from 34% to 63%. Since publication of the review, more studies have documented additional examples of focused deterrence success (Corsaro & Engel, 2015).

Cognitive behavioral therapy (CBT) uses clinical psychological techniques to alter the distorted thinking and behavior of criminal and juvenile offenders. Lipsey et al.'s Campbell review (2007) strongly reinforced, with 58 studies, 19 of which were randomized controlled trials, what numerous reviews had established before: CBT works. CBT has been effective in reducing recidivism of juvenile and adult offenders, in institutional or community settings, as part of a broader program or as a stand-alone intervention. No other intervention in this report can match its reliability and versatility. CBT was associated with a relatively large 25% average decrease in recidivism, but when the most effective types of CBT were used, recidivism declined 52%. These most positive results were not an outlier –approximately 1 in 5 interventions studied produced such effects or better. Hockenhull et al. (2012) further reinforced the findings of Lipsey et al. with respect to CBT.

Recidivism reduction interventions that employ a risk/needs/responsivity framework (CBT is one such program) generate much stronger results than those that do not. This is well established by five reviews (Lipsey, 1999; Dowden et al., 2003; Dowden & Andrews, 2000; Smith et al. 2009) and others not eligible for this meta-review. An important additional finding is that these programs can also work as effectively in community settings as correctional ones (Killias & Villetaz, 2008). These treatments are effective (although less so) even with violent offenders, both adult and juvenile, particularly when CBT is used (Garrido & Quinto, 2007; Jolliffe & Farrington, 2007).

Visher et al. (2005) and Aos et al. (2006) disagreed as to whether vocational training has modest impacts on recidivism, reflecting a broader uncertainty in the field as to the effectiveness of stand-alone employment and training programs.

Jolliffe and Farrington (2007) conducted a "rapid evidence assessment" of 18 studies examining the impact mentoring on "at risk" youth. Overall, mentoring reduced subsequent offending by 4 to 11%, but this result was primarily driven by studies of lower methodological quality. Only 7 of the 18 studies showed statistically significant reductions, however, and mentoring was successful only when it was one of several interventions given. Given these results, "Mentoring is a promising, but not proven intervention," the authors concluded. Fagan and Catalano (2012) identified a single randomized controlled trial demonstrating the effectiveness of a mentoring program.

Fagan and Catalano (2012) identified 10 effective school-based anti-violence interventions, but Alford and Derzon (2012), using an admittedly potentially "overly conservative" approach, found only one school-based anti-violence intervention out of 24 eligible interventions showing significant positive effects. Many programs featured CBT as a central component of their intervention. Early childhood programs such as the famous Perry Preschool program appeared to have especially strong and well-established effects.

Fagan and Catalano (2012) identified 4 studies supporting the effectiveness of family-based anti-violence interventions, including the well-known Multi-Systemic Therapy (MST)[15] and Multidimensional Treatment Foster Care (MTFC) interventions. While this is an admittedly small number of studies, each was a randomized controlled trial. These programs often prominently feature CBT, among other techniques.

Sherman et al. (2015) and Lattimer et al. (2005) both found moderate support for modest impacts with regard to restorative justice, whereby offenders and their victims are brought together to collectively address the aftermath of the offense. A practical limitation in the application of these interventions is the requirement of affirmative consent from both the victim and offender.

Weaver and Campbell (2015) found no impact overall for juvenile aftercare programs, which employ reintegrative services to prepare youth for reentry into their communities. However, the intervention appeared more effective for older youth with more violent histories. James et al. (2013) found a small impact of such programs when well implemented.

Renzema and Mayo-Wilson (2005) and Aos et al. (2006) agreed that electronic monitoring in the U.S. has no impact on recidivism when compared to traditional community supervision, but Di Tella and Schargrodsky (2013) found in a natural randomized experiment that electronic monitoring in Buenos Aires reduced crime at less cost as compared with prison.

Finally, the evidence is clear that surveillance, deterrence, and discipline strategies are ineffective at best in reducing recidivism among youth (Mitchell et al., 2007; Petrosino et al., 2013; Adams, 2003). While boots camps and juvenile curfews have no impacts, Scared Straight programs actually cause harm in that they are associated with modest increases in juvenile recidivism.

BEHAVIOR-BASED APPROACHES

Our searches returned 10 eligible reviews concerning 9 discrete strategies for behavior-based crime and violence reduction.

Table 4: Behavior-Based Approaches

Approach	Evidence	Impact	Outcome	Level	Studies
Gun enforcement	Moderate	Moderate	Crime; violence	Suppression	Koper & Mayo-Wilson, 2006; Makarios & Pratt, 2012
Comprehensive gun violence reduction	Moderate	Strong	Crime; violence	Suppression; tertiary prevention	Petrosino et al., 2015
Gun buybacks	Strong	None	Crime; violence	Primary prevention	Makarios & Pratt, 2012
Gun legislation	Mixed	Modest	Crime; violence	Primary prevention	Makarios & Pratt, 2012

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[15] It should be noted that there appears to be some evidence questioning the effectiveness of Multi-Systemic Therapy (Littell et al., 2005).

Drug courts and treatment	Strong	Strong	Recidivism	Rehabilitation	Holloway et al., 2006; Mitchell et al., 2007; Mitchell et al., 2012; Shaffer, 2006
Drug enforcement	Moderate	Negative	Violence	Suppression	Mazerolle et al., 2006; Werb et al., 2011
Gang behavior regulation	Modest	Moderate	Crime; violence	Tertiary prevention	Gravel et al., 2012
Gang prevention	Modest	Modest	Crime; violence	Primary prevention	Gravel et al., 2012
Comprehensive gang reduction	Modest	None	Crime; violence	Not applicable	Gravel et al., 2012; Hodgkinson et al., 2009

Two reviews (Koper and Mayo-Wilson, 2006; Makarios and Pratt, 2012) find that targeted gun enforcement is moderately effective in reducing gun crime and violence, while gun buybacks are ineffective and that the evidence anti-gun legislation is mixed at best. Petrosino et al. (2015) found that 10 of 11 cross-sector, multi-agency interventions achieved significant reductions in gun violence, but as discussed further below most of these were focused deterrence initiatives.

Somewhat conversely, four reviews here (Holloway et al., 2006; Mitchell et al., 2012; Mitchell et al., 2007; Shaffer, 2006) reinforce the well-established finding that drug treatment and drug courts can significantly impact recidivism. Drug enforcement, however, appears to have limited impact (Mazerolle et al., 2006) and may actually increase violence by destabilizing drug markets and increase violence among drug sellers (Werb et al., 2011).

Lastly, Gravel et al. (2012) conducted a wide-ranging review of gang control strategies, although, much like our work here, its diversity ultimately precluded a quantitative analysis of results. Based on a set of relatively relaxed criteria, the authors identified a set of 38 studies for review. Dividing these into categories, they found that gang prevention strategies showed little signs of effectiveness because of an overly broad approach that included many youth who were unlikely to join a gang. The authors also found that strategies seeking to regulate the behavior of gangs showed some signs of effectiveness, especially those adopting a focused deterrence approach. Programs strictly focused on providing prosocial alternatives to gang members were less effective than those focused on preventing specific gang behaviors. Finally, the authors found that comprehensive and holistic strategies were not effective at reducing gang activity. This finding was reinforced by Hodgkinson et al. (2009), who found that comprehensive gang intervention had only a small, non-statistically significant effect as compared to non-comprehensive strategies.

FINDINGS FROM THE FIELD STUDY

We performed field research in order to supplement the findings of the systematic meta-review and to provide practical guidance concerning program implementation and adaptation. In the U.S., we sought to identify the conceptual, operational, and contextual components shared by leading evidence-informed interventions. In the Northern Triangle, we focused on better understanding

the nature of the violence confronting each country along with the local capacity to adapt and implement evidence-informed solutions.

In the U.S., we conducted site visits and semi-structured interviews in Boston, Chicago, Providence, Los Angeles, and Philadelphia, examining five leading interventions including cognitive behavioral therapy, focused deterrence, hot spots policing, streetworkers and violence interruption, and the comprehensive approach to violence reduction. While it is difficult to generalize across interventions, we observed a number of shared characteristics that may prove useful for future adaptation and implementation.

First, the leading interventions examined in the U.S. made great efforts to identify and engage where the risk of violence was greatest.[16] Dr. Gary Slutkin, founder and CEO of Cure Violence, approaches violence as an infectious disease. He noted that Cure Violence focuses on the highest-risk, contagious individuals with regard to violence and that "specificity was required" in order to successfully change behavior and transform community norms (G. Slutkin, September 16, 2015).

Second, each intervention made extensive efforts to meet high-risk individuals "where they were at," both literally and figuratively. Intensive outreach and follow-up was a hallmark of these programs, as those at the highest risk for violence were often disconnected from mainstream institutions and society. In addition, they approached this cohort in a non-judgmental, compassionate manner while still demanding accountability. Christopher Mallette, Executive Director of the Chicago Violence Reduction Strategy, noted that programs need "folks who can honestly engage these people in a sincere, authentic way, treating them as people and letting them know they are part of the social fabric of the community" (C. Mallette, July 29, 2015). Keeping promises and maintaining credibility was seen as essential in order to retain one's "license to operate" in high-risk environments.

Third, given the inherent risks and demands associated with these efforts, effective safety planning, real-time communication, and flexible but extended hours were all considered necessities. Ordinary bureaucratic structures were not effective in such dynamic settings, so they were discarded in favor of more flexible, responsive arrangements. Molly Baldwin, Founder and Chief Executive Officer of Roca, Inc., stated, "We have to think about safety every day so that young people and the people they work with can be safe" (M. Baldwin, October 7, 2015).

Fourth, each intervention examined had a carefully developed and well-understood theory of change. "Staying true to the model" was frequently emphasized and significant attention was paid to effective implementation. While intervention leaders and staff were passionate about their work, they recognized that enthusiasm alone was insufficient to reduce violence and that their zeal had to be supported by effective implementation along with sound management and administration practices. Anthony Watson, Director of the Becoming a Man program, stated, "I'm going to make a plan to intentionally work with these young men and provide something different than what they may be used to seeing" (A. Watson, July 27, 2015).

Fifth, the effective use of analysis, data, and evaluation was central to the performance of the interventions studied. Furthermore, evaluation was used as a tool to monitor and drive implementation and performance. As noted by Kevin Bethel, Deputy Commissioner of the Philadelphia Police Department, to be successful you must "use the data" (K. Bethel, July 23, 2015).

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[16] Secondary prevention programs like Becoming A Man focused on at-risk youth, but not the highest risk youth.

Sixth, interview subjects universally emphasized the importance of people both inside and outside their organizations. The effective hiring and training of staff was considered a non-negotiable prerequisite of effectiveness. In addition, all subjects believed deeply in the value of partnerships and felt that they could not be successful without the support of outside partners. As Christopher Mallette noted, "It has to be integrated – are your partners willing to integrate their efforts, so that it's one group standing in front of the violent cohort" (C. Mallette, July 29, 2015).

In the Northern Triangle, we conducted visits and interviews in Guatemala City, San Salvador, San Pedro Sula, and Tegucigalpa, meeting with a wide variety of governmental and non-governmental actors. Based on these interactions, we observed a number of common themes, especially in relation to those from the U.S.

First, the passion and commitment of interview subjects matched or exceeded that of the U.S. subjects. Many of the efforts we witnessed were nothing short of heroic and often associated with significant personal risk for those involved. The work of faith-based leaders was particularly powerful, as they were frequently the only ones able to work closely with youth and in areas controlled by gangs or organized crime. As Father Francisco Iznardo, Director of Proyecto Educativo Laboral Puente Belice in Guatemala, stated, "We invest in youth in vulnerable communities, we believe that youth are valuable and if they have opportunities they take them" (F. Iznardo, August 18, 2015).

Second, while there were examples of programs focusing efforts on those most at risk for violence, this was not done consistently or systematically. While partly due to the difficulties and risks associated with such efforts, the inability to focus resources where they were needed most was due mostly to a lack of specific information concerning the scope, scale, and nature of violence in the region. While generalities concerning violence were freely available, precise information concerning where violence concentrated was not accessible to the subjects we interviewed unless they generated it themselves, and then usually only through informal means.

Third, while there were examples of thoughtfully planned and executed interventions, they often lacked the clinical and analytical rigor of their U.S. counterparts. One positive example came from Proyecto Residencial Libertad in El Salvador. As explained by Coordinator Katy Tovar, "Our model has 4 elements: development of social skills through sports and culture with the help of psychologists, opportunities for youth for them to improve their life conditions, prevention of health problems through improving the environment and education, and development of community leadership to make the project sustainable in the future" (K. Tovar, August 20, 2015).

Fourth, few if any programs made effective use of data, particularly with regard to programmatic outcomes. This was one of the biggest obstacles that we observed. In addition, researcher/practitioner partnerships were rare, with few if any programs rigorously evaluating their performance.

Fifth, while many subjects embraced the principle of partnership in theory, real barriers existed to collaboration across and even within sectors. Marco Castillo, Director of Grupo Ceiba in Guatemala, acknowledged difficulties but stated, "Working with the community and coordinating with the police are two of the pillars of our work – they are complimentary, not exclusive" (M. Castillo, August 18, 2015).

Cutting across all themes, we found a widespread lack of capacity in three critical and interrelated areas. First, it was difficult to find reliable data and statistics concerning even the most basic facts relevant to violence reduction. This will be discussed in further detail below. Second, a pervasive

atmosphere of fear, anger, and mistrust appeared to prevent essential coordination across sectors and disciplines. Third, the state lacked the ability to administer fundamental justice-related tasks including the investigation, arrest, prosecution, and sentencing of offenders. Current conviction rates for homicide are approximately 5, 7, and 3 per 100 convictions in El Salvador, Guatemala, and Honduras respectively (Eisner, 2015). While we observed many exciting and hopeful instances of positive action and change, these efforts occurred against the backdrop of incapacity described here.

DISCUSSION

Based on the meta-analysis and field study described above, we reach a number of conclusions concerning what works to reduce violence, both in terms of individual interventions and multiple interventions working in combination.

WHAT WORKS

ELEMENTS OF EFFECTIVENESS

There appear to be six "elements of effectiveness" that successful violence reduction interventions generally share:

- Specificity. Violence is "sticky," i.e. it clusters together, so focusing on the people, places, and behaviors most at risk for violence is critical.

- Proactivity. Violence should be prevented before it occurs whenever possible, either through deterrence or prevention. Active engagement with high-risk populations is critical. Reacting after the fact is necessary but not sufficient.

- Legitimacy. Interventions that create a positive feedback loop between formal (e.g. police) and informal social control (e.g. communities) are more likely to sustainably succeed.

- Capacity. Even the best interventions fail if they are not implemented effectively or lack sufficient resources.

- Theory. A well-defined, well-understood theory of change is critical for both implementation and evaluation.

- Partnership. Interventions do not exist in a vacuum. Actively engaging and partnering with critical stakeholders is essential.

In many respects, what doesn't work in reducing violence is simply the opposite of what does. Ineffective interventions are generally overbroad and reactive in their focus, lacking in legitimacy, improperly implemented, lacking a sound theory of change, and working in isolation or even in conflict with other organizations.

FOCUSED DETERRENCE AND COGNITIVE BEHAVIORAL THERAPY

Of the 30 strategies examined by the meta-review, two stand out in terms of evidentiary strength and relevance to violent offending specifically: focused deterrence and CBT. We discuss each in turn.

Focused deterrence, also known as the "Pulling Levers" strategy, generally features the following components:

- Selection of a crime problem, typically youth or gun homicide.
- Using data and intelligence to identify and analyze key groups of offenders and their behavior.
- Assembly of a multi-sector task force generally including law enforcement agencies, service providers, and community representatives.
- Conducting special enforcement operations directed at those groups, using any legal means necessary, to substantially influence their behavior.
- Supplementing enforcement operations with concrete offers of assistance to those groups, as well as engaging "the moral voice of the community."
- Communicating clearly, directly, and repeatedly with offending groups, informing them that they are under scrutiny, that their behavior (such as shootings) will trigger responses, and they can avoid such responses by changing their behavior. Much of this communication occurs during "forums," "notifications," or "call-ins" – a key feature of focused deterrence. During these meetings, the multi-sector task force engages with offending group members face-to-face, placing them on notice that their actions will have either positive or negative consequences, both for themselves individually for the entire group (Braga & Weisburd 2012).

To summarize, these interventions deter violent behavior by reaching out directly to offending individuals and groups, explicitly stating that violence will no longer be tolerated, and then backing that message with credible threats of enforcement and credible promises of assistance, i.e. "pulling every lever" to influence offender behavior (Gravel et al. 2012).

Focused deterrence distinguishes itself from other strategies with a laser-like focus on (a) the specific groups most likely to offend, (b) the specific behavior it seeks to change, and (c) the specific message delivered to the groups about the behavior. Often relating to gun violence, the message is simple: stop shooting and we will help you, keep shooting and we will put you in prison. "Pulling levers focused deterrence strategies are highly targeted interventions that are not broadly diffused across large populations or large areas" (Braga & Weisburd, 2012). When successful, these interventions carefully maintain their focus on a specific behavior, e.g. gun violence, and not criminal behavior or identity more generally. The message is not "stop all crime" or "leave the gang," it is simply "stop shooting, stop killing."

Another key element of the intervention is the balancing of deterrence with concrete offers of assistance and community engagement. These strategies enhance the perceived legitimacy of the effort among both offenders and the community. Braga and Weisburd (2012) observed that, "the large effects we observe come precisely from the multi-faceted ways in which this program influences criminals." As they noted later (2014), "Other prevention frameworks, such as community social control and procedural fairness, might help explain the observed impacts of focused deterrence programs on crime."

To learn more about focused deterrence, we visited the Violence Reduction Strategy (VRS) in Chicago, Illinois. In a recently published quasi-experimental study, researchers found that gang members participating in Chicago VRS were 23% less likely to be involved in shootings and 32% less likely to be become a gunshot victim in the year after treatment as compared with similar gang factions (Papachristos & Kirk, 2015). Based on these results, the authors concluded, "[F]ocused

intervention efforts such as VRS can produce significant reductions in gun violence, but especially gunshot victimization, among gangs."

VRS is supported by the National Network for Safe Communities (NNSC), which assists in the implementation of focused deterrence strategies across the U.S. We conducted semi-structured interviews with VRS and NNSC leaders and managers in order to identify the key conceptual, operational, and contextual components of focused deterrence. A key driver of intervention effectiveness, according to those interviewed, was an emphasis on group behavior. Group dynamics and social norms are primarily responsible for violent behavior, subjects believed, as opposed to structural factors or other forms of crime. In order to shift group behavior, many subjects stated that ties to the community must be reestablished, as violent groups are part of a larger community that does not approve of such behavior. Finally, in order to properly deter and incentivize group behavior, maintaining credibility by following through on promises of both enforcement and assistance to the entire group was deemed critical.

Operationally, careful analysis and the use of data were deemed essential for both identifying key groups of offenders and understanding their activities and behavior. Additionally, subjects believed that success depended heavily on strong partnerships between stakeholders who may have never interacted before. Sufficient administrative support and effective project management was also considered a necessity.

Contextually and with regard to the adaptability of focused deterrence to the context of the Northern Triangle, there are several potential obstacles. First, focused deterrence relies heavily on the capacity and legitimacy of law enforcement, both of which are frequently uncertain. Second, it requires strong partnerships between police, service providers, and community members, all of which may be especially difficult to establish in the atmosphere of fear and distrust that often pervades communities in the region. Third, the ability to conduct effective data analysis is critical, and capacity for such work is lacking. Fourth, there is a key challenge relating to the nature and scale of the problem –the groups driving violence in the region are significantly larger, more organized, and more dangerous than those in the U.S.

These obstacles are reasons for caution, not inaction. Exploration and experimentation with focused deterrence strategies in the region should begin slowly, but it should begin. The strategy itself is inherently flexible, beginning in each instance with a careful local assessment of violent offending and then developing tailored responses in response. Thus, focused deterrence in the Northern Triangle would likely look considerably different than it does in the U.S. Finally, there is always the option to decide against using such strategies if they are supported by the local assessment.

CBT focuses on changing the distorted thinking and behavior of criminal and juvenile offenders, including self-justificatory thinking, misinterpretation of social cues, displacement of blame, deficient moral reasoning, and schemas of dominance and entitlement, among others (Lipsey et al., 2007). CBT assumes that such deficits are changeable rather than inherent and works to correct them using a set of structured techniques including cognitive skills training, anger management, and various supplementary components related to social skills, moral development, and relapse prevention.

It is important to note that not all CBT programs are equally effective. According to Lipsey et al. (2007), key drivers of CBT effectiveness include focusing on high-risk offenders, ensuring sound implementation, and including certain programmatic components while excluding others. Anger

control and interpersonal problem solving components[17] were associated with stronger effects, while victim impact and behavior modification components[18] were associated with weaker effects. Sound implementation includes the limiting of treatment dropouts, careful monitoring of treatment implementation, and adequate training for treatment providers.

Additionally, Lipsey et al. made a number of important observations with regard to the flexibility of CBT. First, CBT was more effective when combined with other services, rather than when operating as a stand-alone intervention. Examples of such services included mental health counseling, employment and vocational training, and educational programs. Second, "brand name" versions of CBT did not outperform "generic" versions, meaning that it is "the general CBT approach, and not any specific version, that is responsible for the overall positive effects on recidivism." Third, CBT was as effective for juveniles as adults and could therefore be useful in both juvenile justice and criminal justice settings. Fourth, the setting of CBT treatment did not affect its performance. Offenders treated in prison performed as well as offenders treated in the community.

Moving beyond Lipsey et al.'s review, those surveying the evidence supporting CBT appear unanimous: "There is a clear consensus that cognitive/behavioural programmes in general are effective in reducing the likelihood of re-offending" (Davis et al., 2008). "[It is a] striking fact that meta-analyses of the offender treatment literature have consistently favored cognitive-behavioral interventions over other treatment modalities" (Smith et al., 2009). "Cognitive-behavioral programs appear to show the most favorable results" (Jaitman & Compean, 2015). The Washington State Institute for Public Policy, a U.S. national leader in juvenile and criminal justice cost-benefit analysis, recently reported that CBT for adult offenders yields a savings of $26 for every dollar invested, with a 100% likelihood that the benefits of CBT will exceed its costs (Lee et al., 2015).

To learn more about CBT, we visited the well-known Becoming a Man (BAM) program in Chicago, Illinois. In two separate randomized controlled trials, BAM participants were arrested substantially less than those who did not participate (Heller et al., 2015). The first study included 2,740 males in 7th through 10th grade across 18 public schools. Over the course of one academic year, participants received BAM group counseling once a week, along with one session of after-school sports programming that incorporated BAM principles. During the span of the program, BAM participants were 44% less likely to be arrested for a violent crime than the control group and 36% less likely to be arrested for any other crime. In addition, participants were more engaged in school, which the authors forecasted could lead to a 7-22% improvement in graduation rates. The second study included 2,064 male 9th and 10th graders across 9 public high schools and found 31% reduction in arrests for BAM participants.

Heller et al. (2015) explain the BAM results using a concept called "automaticity." To save time and energy, human beings react automatically to wide range of everyday situations. Disadvantaged youth demonstrate no more automaticity than mainstream youth, but they may simply suffer greater consequences for their automatic responses. For these youth, automatic responses that may be appropriate "on the street" may not translate into success in the classroom, and vice versa.

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[17] Anger control concerns identifying triggers and cues that arouse anger and maintaining self-control. Interpersonal problem solving involves skills for dealing with interpersonal conflict and peer pressure (Lipsey et al., 2007).
[18] Victim impact concerns encouraging offenders to consider the impact of their behavior on their victims. Behavior modification involves contracts and/or reward/penalty schemes to reinforce and incentivize appropriate behavior (Lipsey et al., 2007).

BAM attempts to reduce automaticity by helping youth slow down their thinking, recognize their automatic responses, and consider whether those responses are contextually appropriate. Participants are not asked to choose "school life" over "street life," but instead are trained to tailor their responses to whatever context they are in, i.e. don't bring the street to school and vice versa.

Heller et al. used games that provoked retaliation for unfair behavior to directly measure the impact of BAM on automaticity, and found that the program increased the response time of youth by 79%. They note that the BAM intervention is "manualized" for replication and has "a level of cost-effectiveness that is at least as favorable as almost any other crime-prevention intervention that has been studied seriously." Heller et al. conclude, "Our results suggest that it is possible to generate sizable changes in outcomes by helping disadvantaged youths recognize their automatic responses and make better decisions."

We interviewed members of BAM leadership, management, staff, and students. In each interview, we asked subjects to identify the conceptual, operational, and contextual components of BAM's effectiveness. Conceptually, there was broad agreement among subjects at all levels that there were three essential elements for BAM: authentic youth engagement, clinically rigorous CBT-informed counseling, and "men's work."

Authentic youth engagement meant that program staff are fully capable of meeting at-risk youth "where they're at," respecting, and earning respect from, program participants. This does not mean that program staff must be of the same race, class, or background as participants – many are not. It does mean that staff must be able to interact authentically with youth and be "real" with them, empathizing but also challenging when appropriate.

Clinically rigorous CBT was another key driver of effectiveness. Subjects believed that while BAM would have been a somewhat successful program based just on youth engagement, CBT supercharged the program's performance. BAM carefully implements its CBT curriculum with rigorous hiring standards and training – staff must complete 300 hours of training prior to working with youth.

Men's work, while appearing to be loosely connected to the men's movement that emerged in the U.S. and Europe in the 1960s, is really the distinctive creation of BAM's creator, Anthony DiVittorio. While it has no evidentiary base, men's work is an essential element of the overall program and appeared to be one of the most appealing parts of the program for many participants. The appeal of men's work may lie in the establishment of formal rites of passage to adulthood, many of which are missing from modern life, particularly for the young men most at risk for violence.

Operationally, leadership, management, and staff had a rigorous understanding of BAM's theory of change and had spent a great deal of time isolating the core elements of the program's effectiveness. They focused on effective implementation and carefully monitored fidelity to their model.

With regard to context, BAM subjects felt that if the program retained its three essential elements and sufficient attention was paid to hiring and training, the program could be replicated elsewhere. While BAM's school-based context was not considered essential, making sure that participants attended regularly was critical, so a community-based setting would need some alternative means of ensuring consistent attendance. Beyond the essential elements, hiring, and training, BAM subjects believed that the program could be adapted to be other settings. "We feel confident that the six values of BAM will prepare young men to succeed across different urban contexts, but are mindful

that responsiveness to the community served and the counselors' cultural competence are important in delivering BAM successfully anywhere" (A. DiVittorio, July 29, 2015).[19]

It should be noted that BAM was not designed to be a violence reduction program, but it deals directly with the precursors to violence – respect, anger and conflict. It should be further noted that BAM does not engage youth at the highest risk for violence, most of which are not in school. Thus, while other CBT programs have been successful with the most high-risk offenders, BAM is currently most suitable for youth at an elevated but not highest risk for violence and offending.

CBT has been successfully implemented in settings possibly even more challenging than the Northern Triangle. Blattman et al. (2015) conducted a randomized controlled trial of the Sustainable Transformation of Youth in Liberia (STYL) program – a CBT-informed intervention in Liberia, Africa. The evaluators recruited 999 criminally engaged Liberian men, randomly assigned half to eight weeks of CBT with an emphasis on self-control skills and positive, noncriminal self-image. In addition, participants were also randomly assigned $200 cash payments for program participation. CBT was associated with a 20-50% reduction in crime and violence. Cash raised incomes and reduced crime in the short-run but the effects quickly dissipated. When CBT and cash payments were combined, the effects of the CBT were extended at least a year, which the authors theorized was because cash provided participants more time to practice and reinforce the training.

With STYL, program participants learned to manage emotions by practicing nonaggressive responses, recognizing signs of anger, and using distracting or calming techniques. They also studied goal setting by breaking down goals into sub-goals and planning to accomplish them via concrete actions. Finally, participants changed their appearance through haircuts, shaves, improved personal hygiene, and new clothing and then practiced re-engaging in mainstream society by re-establishing ties with family, engaging in routine activities like shopping and banking, and recruiting members of their local community to act as mentors.

Blattman et al. noted that the possibilities for replicating the results of STYL (and CBT) are promising. First, STYL was adapted from and consistent with established U.S. CBT programs with a strong evidence base. Second, STYL used local facilitators and recruited them from previous graduates, enhancing scalability. Third, STYL was both inexpensive and short in duration. Fourth, the program was memorialized in manuals, curricula, and training guidelines to ensure fidelity. "Overall, these results echo the effects of adolescent CBT programs in Chicago that target similar automatic behaviors" (Blattman et al., 2015).

In conclusion, there is strong case for greater investment in CBT programs generally, and for replications (with adaptation) of BAM and STYL in particular. CBT programs have proven effective, cost and time-efficient, politically and culturally neutral, and adaptable to a wide range of settings, populations, and contexts.

POLICING

Overall, the various effect sizes of the policing strategies identified were modest to moderate, but it is clear that, despite inconsistent implementation, the right combination of policing strategies are essential to crime and violence reduction. When police adopt problem-solving approaches, they maximize their impact while minimizing collateral effects on the community. When they adopt zero-tolerance, aggressive order maintenance strategies, the opposite occurs. When they focus on

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[19] The six core values of BAM are integrity, accountability, self-determination, positive anger expression, visionary goal setting, and respect for womanhood.

problems such as hot spots, gun carrying, and disorder, they are more effective than when they do not. As noted by the National Research Council, "There is strong research evidence that the more focused and specific the strategies of the police… the more effective police will be in controlling crime and disorder" (Skogan & Frydl, 2004).

Consistent implementation has been a major challenge for the police strategies identified in the meta-review. While this is due in part to institutional resistance, a lack of theoretical clarity is also to blame in and among the models discussed in this report. This is especially so with community-oriented policing, which despite billions of dollars in public investment has shown no consistent impact on crime or violence in the U.S. From a values perspective, we agree with Braga (2015), "Community policing should be the foundation of any general crime prevention approach," but clearly more work is needed to combine the spirit of community-oriented policing with more rigorous strategies and models. Procedural justice is emerging as an evidence-informed alternative means of improving legitimacy of the police, and could greatly strengthen the community-oriented policing framework even if it is unlikely to replace it entirely.

REHABILITATION

One of the strongest findings of the meta-review is that well-designed, well-implemented recidivism reduction programs are effective. This is so for adult and juvenile offenders, violent offenders, drug offenders, and others. Importantly, many of these interventions work equally well in community settings as in correctional ones. As summarized by Lipsey and Cullen (2007):

> The preponderance of research evidence, therefore, supports the general conclusion that rehabilitation treatment is capable of reducing the re-offense rates of convicted offenders and that it has greater capability for doing so than correctional sanctions. The volume of research and the consistency of the findings of the systematic reviews make this a sufficiently sound general conclusion, bordering on beyond a reasonable doubt, to provide a basis for correctional practice and policy.

Given the combination of high rates of impunity and prison overcrowding (Jaitman & Compean, 2015) and that rehabilitation works as well in the community as it does behind bars, it may be worth reconsidering certain sentencing and incarceration policies in the region. Recidivism reduction programs are likely suitable alternatives to incarceration for a broad array of less serious offenses, reserving scarce prison space for only the most deserving and violent crimes. This argument is reinforced further by the current state of most detention facilities in the region, which are often overcrowded, dangerous, unsafe, and unhealthy. Given this, rehabilitation in the region should be community-based and not corrections-based until conditions improve. The first priority for any correctional facility is to be safe, secure, and humane – once that is accomplished, programming for rehabilitation and reentry can begin.

GANGS

Both Gravel et al. (2013) and Hodgkinson et al. (2009) note with disapproval the weak and fractured state of gang-related research despite decades of effort. In addition, the Campbell Collaboration has commissioned systematic reviews on the effectiveness of CBT for preventing youth gang involvement (Fisher et al., 2008), providing opportunities to prevent youth gang involvement (Fisher et al., 2008), and preventive interventions to reduce youth gang involvement in low- and middle-income countries (Higginson et al., 2015). In each instance, researchers could not identify a sufficient number of rigorous studies to perform a review – a fairly remarkable outcome.

Gravel et al. (2013), in their review, suggest that more generalized delinquency, crime, and violence strategies may be more effective than those tailored specifically to gangs, as focusing on gang identity may only serve to increase social cohesion between gang members. We believe that reframing policy approaches to gangs in this manner may be promising.

FIREARMS AND ILLEGAL DRUGS

Between 2005-2012, the UNODC (2014) estimates that 72.9%, 81.2%, and 81.8% of all homicides were committed with firearms in El Salvador, Guatemala, and Honduras respectively – almost double the average global rate of 44%. We found that directed gun patrols are moderately effective at reducing gun crime, gun buybacks are not, and the evidence concerning gun legislation is mixed. While a more thorough examination of this issue is beyond the scope of this report,[20] it appears that on a programmatic level, policymakers should not necessarily focus on restricting access to all guns, but instead focus efforts on those guns most likely to be used based on where they are carried and who is carrying them. In addition to be being consistent with the evidence, these more targeted strategies are likely feasible as a matter of politics and budgets.

Again, while a broader examination of drug laws is beyond the scope of this report, on a programmatic level we found that aggressive drug enforcement yields little anti-drug benefits and generally increases violence. Alternatively, drug courts and treatment have a long history of effectiveness. It appears that while violence and drugs are interrelated, aggressive enforcement should be reserved for former, with treatment prioritized for the latter.

WHAT IS MISSING

As stated previously, our search strategies for the meta-review were extensive, covering over 2,200 individual studies. Despite best efforts, our searches may nevertheless have missed a small number of relevant reviews, and many reviews were intentionally excluded based on our eligibility criteria. While we are confident in our methodology, we were surprised that some of the better-known primary and secondary prevention strategies were not captured in our searches.

There may be at least two explanations for such absences. First, many evaluations of prevention programs do not measure crime and violence outcomes directly, instead targeting risk factors such as drug use and aggression. Our criteria focused direct outcomes only, so these evaluations would be excluded from our review. Second, evaluations of early prevention programs must follow subjects for an extended period of time until they reach, at a minimum, early adulthood in order to measure criminal and violent offending. Tracking such data is an expensive and lengthy process, so it is rarely attempted. Consequently, if there are relatively few studies on a given policy question, no systematic review or meta-analysis would be attempted, and thus no such review would be available to be captured by our searches.

Whatever the reason, it is important to note that the absence of evidence, especially in this area, is not necessarily an indication of ineffectiveness with regard to violence reduction. It simply means that such evidence was not available to be captured by our search strategies.

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[20] Hahn et. al (2005) conducted a systematic review of firearms laws and were unable to determine the effects, if any, of such laws.

THE CONCENTRATION PRINCIPLE

Of the 30 strategies identified above, only four (focused deterrence, CBT, the risk/needs/responsivity model, drug courts and treatment) demonstrated clearly significant positive effects on crime and violence. Another three (scared straight, boot camp, gun buybacks) clearly demonstrated no or negative impact. The rest – two-thirds of all strategies – were associated with only modest or moderate effects. In short, a few programs work well, a few don't, and most work a bit. Additionally, even the best interventions are not powerful enough to permanently reverse high rates of violence on their own. Absent a magic bullet, success may lie in the accumulation of individually modest but collectively robust programmatic effects. Risk and protective factors are cumulative by nature (U.S. Surgeon General, 2001), so a strategy that builds impact over multiple interventions makes sense.

Leveraging multiple programmatic effects must be done thoughtfully, otherwise it simply amounts to policy "more-ism." One of the most powerful criminological findings from the past two decades is that violence is sticky, clustering in specific places, among specific people, and around specific behaviors. In Boston, 1% of youth aged 15-24 were responsible for over 50% of city-wide shootings, and 70% of total shootings over a three decade period were concentrated in an area covering approximately 5% of the city (Braga & Winship, 2015). In Minneapolis, in 1986 50% of 323,000 calls for police service came from 3% of addresses (Sherman, Gartin & Buerger,1989). In five Latin American cities, 50% of homicides occur in 1.59% of blocks (CAF, 2014). In Venezuela, 80% of homicides in Sucre, Caracas came from just 6% of its street segments (Beliz, 2015). In most major cities, 0.5% of the population is responsible for 75% of the homicides (Muggah, 2015).

It follows that programmatic interventions targeting these clusters are more likely to be effective than those that do not. Across the spectrum of anti-violence programming, it is well established that interventions that focus on the highest risk places, people, and behaviors generate the strongest effects. This is true of interventions relating to policing (Braga, 2015), gang reduction (Gravel et al., 2012), youth firearm violence reduction (Petrosino et al., 2015), youth violence prevention (Matjasko et al., 2012); and adult and juvenile recidivism reduction (Hollin, 1999; Lipsey & Cullen, 2007).

Accumulating effects and directing them towards a small number of places, people, behaviors will fail if crime is displaced and simply "moves around the corner." This commonsense notion of a "balloon effect" (squeeze one end, the other expands) is responsible for much of the pessimism surrounding crime and violence control. If displacement effects were frequent and significant, any efforts to pinpoint crime and violence would be pointless. Fortunately, a robust body of rigorous evidence clearly establishes that when crime and violence are targeted, displacement is minimal and the impact to surrounding areas is more likely to be positive than negative. "[O]ver 30 years of research evidence on this topic… suggests that crime relocates in only a minority of instances. More commonly, it has been found that the opposite, a diffusion of crime reduction benefits in nearby areas not targeted by interventions, occurs at a rate that is about equal to observations of displacement" (Johnson et al., 2014). Similarly, "Since 1990, there have been five main reviews of empirical studies that report on displacement… All five reviews arrive at the same basic conclusions: there is little evidence that crime prevention strategies lead to displacement" (Telep et al., 2014).

While the evidence is clear with regard to displacement of crime and violence generally, it is equally clear that highly motivated and sophisticated criminal organizations such as transnational drug cartels are capable of relocating or otherwise responding to targeted interventions. This fact is

not an argument against targeted interventions; it is merely a qualifier, reinforcing our earlier point that different strategies are required for different forms of crime and violence.

Given that most programmatic interventions on crime and violence have modest impacts, that crime and violence cluster around small numbers of places, people, and behaviors, and that targeting such clusters does not lead to displacement, the case for the concentration of efforts is clear. In order to achieve significant reductions in violence, resources should be amassed and aligned where they will be most effective. Concentrating efforts is intuitive, backed by strong evidence, and perhaps most importantly, economically and administratively feasible. Public and private institutions responding to violence lack the capacity to be everywhere, but they can be where it matters most.

A corollary of the case for concentration is the need for coordination. Unfortunately, there is little practical guidance for policymakers on how to identify the right mix of interventions for the right places, people, and behaviors, or on how to coordinate them effectively (Abt, 2014). Additionally, the case for "comprehensive" programs is decidedly mixed. Gravel et al. (2012) and Matjasko et al. (2012) found comprehensive or holistic approaches to be ineffective due to the inherent implementation challenges associated with getting numerous stakeholders and institutions "on the same page." Makarios and Pratt (2012) and Petrosino et al. (2015) claim such approaches work because they capitalize on the strength and diversity of multiple stakeholders. Finally, Hodgkinson et al. (2009) simply found insufficient evidence to reach a definitive conclusion either way.

Interestingly, whether one believes these approaches to be effective depends heavily on how one defines the term "comprehensive." More specifically, when focused deterrence interventions are included in the definition of comprehensive, the strong effects of those programs generally sway such reviews in their favor. When such interventions are excluded, researchers generally find such interventions wanting. As illustrated by Gravel et al. (2012),

> "Comprehensive and holistic strategies, despite their promises, have not been shown to be consistently effective... For the Spergel Model specifically, lack of guidance on implementation, unrealistic expectations regarding stakeholder partnerships, and reliance on a one-size-fits-all approach may have hindered such programs. However, comprehensive programs such as Project Safe Neighborhoods in Chicago, combining a [focused deterrence] strategy with community outreach, have shown clear signs of effectiveness."

Thus, the impacts of focused deterrence programs appear to swing the evidence in favor of or against comprehensive approaches, depending on whether they included in the definition of the term. As further noted by Gravel et al., less is generally more when it comes to comprehensiveness:

> "[w]hile 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 (e.g., 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."

Finally, Fagan and Catalano (2012), in a systematic review of youth violence literature, found the following:

"Prevention science tends to promote multicomponent interventions… as most effective because they can simultaneously address multiple causes of problem behaviors, but some findings suggest that significant and meaningfully large decreases in violence can also be evidenced when focusing on a narrow set of risk and protective/promotive factors in just one domain."

We believe that complete comprehensiveness, while laudable in theory, is unlikely to be achievable in practice. The best case for multi-disciplinary 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 limited coordination capacity, so overgeneralization should be avoided. Comprehensive efforts should focus first and foremost on the places, people, and behaviors most important to the issue at hand: violence. In short, comprehensiveness should not be pursued at the expense of concentration.

In public health terminology, indicated and selected populations must be prioritized over universal ones, with tertiary and secondary prevention strategies emphasized over primary ones. Limbos et al. (2007), who conducted a systematic review of 41 youth violence interventions and found that effectiveness increased as the intervention level moved from primary through secondary to tertiary prevention. Focusing on the 15 of 41 studies in the review that were randomized controlled trials, the authors noted that two of six (33%) primary interventions, three of seven (43%) of secondary interventions, and two of two (100%) tertiary interventions were effective in reducing violent behavior in youth. As Matjasko et al. (2012) observed, "[P]rograms that target selected and indicated populations tend to have larger effect sizes than those that do not. This finding has been replicated in multiple studies."[21]

The City of Los Angeles Gang Reduction and Youth Development (GRYD) Program is one of the best examples of the comprehensive approach. No other effort in the U.S. matches its scope – GRYD manages or coordinates a wide range of primary prevention, secondary prevention, intervention, and suppression strategies and maintains an annual budget exceeding $20 million. Despite its massive scale, GRYD remains focused on the key places and people that matter most to violence reduction. As to place, GRYD operates in specific "GRYD zones" where gang violence is most common. With regard to people, GRYD uses a Youth Services Eligibility Tool (YSET) to identify youth at elevated risk for gang involvement. A final evaluation is pending, but in the first five years of operation GRYD zones experienced a 48% decrease in assaults against officers with lethal weapons, a 23% decrease in gang-related fights, and a 33% reduction in total homicides (Swift, 2012).

One practical recommendation for applying the concentration principle and its coordination corollary is to begin by identifying risk places, people, and behaviors most closely associated with violence. Next, identify the small number of stakeholders whose participation is absolutely necessary to successfully address those factors. As noted by David Kennedy, Director of the NNSC, "most 'comprehensive' strategies get everybody together and then say, what are we going to do? This approach has a small core group figure out what will work, and then brings together those needed to do it" (D. Kennedy, October 1, 2015).

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[21] Fagan and Catalano (2012) found differently, concluding, "This review demonstrates that universal services can be effective in reducing violent behaviors, as can interventions targeting selective and indicated youth." That said, selected and indicated outperformed universal interventions in their study.

THE IMPLEMENTATION IMPERATIVE

One does not need a meta-review to appreciate the importance of implementing interventions effectively, but given the importance of the point it may bear reemphasizing – strong program design plus weak implementation equals failure. Lipsey (2009) has noted that "in some analyses… a well-implemented intervention of an inherently less efficacious type can outperform a more efficacious one that is poorly implemented." Studies that examine implementation find without exception that it is strongly related to program effectiveness (Lipsey & Cullen, 2007; Hollin, 1999). It should also be noted that "model" programs do not necessarily outperform similarly well-designed, well-implemented interventions that are generic and lack brand name recognition (Lipsey, 2009).

In order to implement effectively, careful attention must be paid to the quantity, intensity, and/or dosage of a given intervention. Not surprisingly, greater intensity and higher treatment doses are generally associated with larger effects (Matjasko et al., 2012). The Research National Council (2013), one of the most prestigious scientific bodies in the U.S., concluded that with regard to prevention, "Whatever the specific mechanism, the appropriate focusing of more intense (and costly) interventions on higher risk adolescents produces a greater reduction in subsequent offending and limits the negative effects of unwarranted intensive intervention on less serious offenders." It should also be noted that intensity does <u>not</u> necessarily mean longer in duration. In fact, several short-term but concentrated interventions (e.g., MST and MTFC) have generated significant and lasting effects (Fagan & Catalano, 2012). Consistent with the concentration principle, to be effective in reducing violence, policymakers should reserve scarce resources for a smaller number of high-intensity, high-cost interventions.

In the context of the Northern Triangle, a key component of implementation is the adaptation of interventions developed in a different setting in consultation with local stakeholders. In such instances, the critical challenge is identifying which intervention components can be changed to suit the new context and which must be preserved in order maintain fidelity to what made the intervention successful in the first instance (Petrosino et al., 2015).

THE EVALUATION IMPERATIVE

A disappointing but not surprising result of the meta-analysis was the fact that no reviews were identified from Latin America, although several reviews contained individual studies from the region. A recent preliminary investigation of Latin American citizen security interventions indicates that 7% of approximately 1,350 programs identified feature a strong evaluation component with positive findings, with more than 57% having no evaluation component whatsoever (Alvarado et al., 2015). "[R]esearch in this field has experienced a significant rise in importance and prominence in the developed world, while work focusing on LAC is extremely limited" (Jaitman & Compean, 2015). As noted by Klein (2011), when sound research is lacking, "almost everything is promising because so little has been tested properly." We see that reflected in our own meta-analysis, where fully two-thirds of the strategies reviewed would appear to fall into this category.

Evaluating interventions effectively means incorporating evaluation into program development from the beginning, starting with conceptually clear theory of change. In addition to the benefits of evaluation for guiding future action, we discovered an unanticipated current benefit in our field study: evaluation often assists and drives effective implementation. This finding was reinforced in the literature, where, as noted by Sherman (2012), "evaluation can provide an early warning to crime prevention leaders that the innovation is not being implemented as planned."

A key component of effective programs identified in the meta-review was the effective use of analysis and data. This finding was also reinforced by our interviews with program leaders, developers, managers, and staff. Without analysis, it is impossible to identify the places, people, and behaviors most in need of change. In the U.S., data analysis is essential to success in crime and violence reduction (Braga, 2015), yet reliable statistics in Latin America are "at best scarce, typically of very bad quality and, at worst, not publicly available or simply not existent" (Jaitman & Compean, 2015).

Finally, in both the U.S. and Latin America, there is a paucity of useful cost-benefit information. "The criminal justice system has lagged behind fields such as engineering, medicine, public health, and environmental protection in efforts to monetize benefits" (Greenwood, 2008). This failure leads us to undervalue investment in public safety and robs policymakers of critical information that could be used to advocate for additional funds. Relatively small reductions in crime, especially violence, can be quite cost-beneficial. For example, even a 5% reduction in recidivism for high-risk offenders can generate substantial benefits to taxpayers and potential crime victims (Aos et al., 2006; Greenwood, 2008).

RECOMMENDATIONS

Governmental and non-governmental funders have a unique role to play in the development of effective policies and practices to reduce violence in El Salvador, Guatemala, and Honduras. While they must generally work through intermediaries to make change, freedom from operational and day-to-day responsibilities enables them to focus on middle and longer-term outcomes. Funders can support the implementation of evidence-informed strategies, promote the development and diffusion of scientific data and knowledge, offer training and technical assistance, and use their bully pulpit and convening power to promote policy and systems change (Robinson & Abt, 2016). Based on the findings and discussion above, we recommend the following to governmental and non-governmental funders seeking positive outcomes in this important area.

First, funders should recognize the centrality of reducing violence to poverty reduction and development in the region and globally. As Gary Haugen writes in *The Locust Effect*, "[W]e must clearly elevate an aspect of poverty in our world that is both underappreciated and very distinct… That aspect of poverty is violence—common, everyday, predatory violence." In responding to this recognition, funders should create space within their portfolios for programming where reducing violence is the exclusive, or at least primary, focus.

Second, within that space, funders should review their activities and investments and begin to align them with the evidence presented in this report and elsewhere. Transitioning to evidence-informed strategies ought to be a purposeful but incremental process. If there is strong evidentiary support for an anti-violence strategy that is not currently being pursued, funding for that strategy should be explored. For instance, funders could launch a multi-site experiment of focused deterrence across the three countries in the region. As noted by Braga and Weisburd (2012), "existing evidence [for focused deterrence] is strong enough to warrant a large investment in multi-site experiments. Such experiments could solve the problem of small numbers of places in single jurisdictions, and would also allow for examination of variation in effectiveness across contexts."

If the weight of the evidence is clearly against a strategy already in operation, reducing or eliminating funding for that strategy should be considered. For instance, where funders support

overly punitive approaches to youth such as Scared Straight, those programs should be reconsidered or simply discarded.

If the evidence is unclear or equivocal with regard to a particular strategy, funding to enhance that strategy by applying the above-described elements of effectiveness, concentration principle, and the imperatives of implementation and evaluation should be contemplated. For example, many primary prevention programs could be significantly strengthened by the addition of a CBT component and a narrowed emphasis on secondary and tertiary prevention, i.e. an emphasis on the places, people, and behaviors most closely associated with violence.

We use qualified language here – explored, considered, contemplated – intentionally. Evidence-informed strategies from the U.S. and elsewhere may not be equally effective in a dramatically different context, and it is only through a careful process of consultation and adaptation with the full participation of local stakeholders that these programs should be implemented.

Third, funders should build internal and external capacity for evidence-informed violence reduction. Internally, they should build expertise by recruiting new personnel and training existing staff with an emphasis on analysis and evaluation in criminal justice or a closely related field. Externally, funders should build capacity by creating local networks of interest, learning, and practice to identify leaders in violence reduction and support those leaders in their professional development by offering training and technical assistance in a variety of areas, including administration, accounting, statistics, and evaluation, among others (we expand on this further below with regard to research and evaluation).

Fourth, as noted by Sherman (2012), "In the long run, everyone benefits from knowing what works and what doesn't." The case for increased investment in analysis and research for crime and security has been made already by the World Health Organization and the Inter-American Development Bank (WHO, 2010; Jaitman & Compean, 2015), and we adopt their arguments here by reference. Despite the reams of evidence synthesized by this report, it is disturbing to note that many of our conclusions rest on a single relatively untested assumption: that violence behaves in the Northern Triangle at least somewhat similarly to how it behaves in the U.S. The case for the concentration principle, among other conclusions in this report, is dependent on this being true. Funders should launch coordinated regional research efforts to answer this and other fundamental questions in order to better understand the scope, scale, nature, and concentration of violence in each country, along with each country's capacity for evidence and data-informed policy. These research efforts would emphasize coordinated approaches and consistent methodologies across countries to ensure the comparability and generalizability of results.

In addition, funders should work to better coordinate and systematize their approaches to program evaluation. For instance, insisting that all evaluations be at least a level 3 or higher on the Maryland Scale of Scientific Methods (Sherman et al., 1998) and report results in a standardized manner would greatly facilitate meta-analysis. Funders should collaborate and plan together for the cumulative development of knowledge in violence reduction, building evidence study by study to inform policy across the region. Meta-analysis can play an essential role in this area, going beyond a simple documenting of programs to provide "a clear summary of evidence as well as a benchmark against which to assess a program's success" (Gravel et al., 2013). Meta-analysis is complicated or prevented when studies do not consistently report results in a manner suitable for statistical synthesis, "[t]hus, more consideration needs to be given to the use and reporting of standardized metrics in primary evaluations" (Johnson et al., 2014). Additionally, funders should considering requiring that evaluations include specific information concerning cost effectiveness.

Further, funders should promote local research networks and partnerships to stimulate the development of local research capacity. Care should be taken to build this capacity within traditional educational and governmental institutions and avoid overreliance on private vendors. Adding budget carve-outs and funding requirements to include local researchers could promote Ratcliffe's (2014) vision of "analytical localism." As noted by Sherman (2012), "It is a huge mistake to design an innovation without first diagnosing the problem locally. Many security programs, sadly, are designed without access to local crime data… if that is the situation, it is not an obstacle to solving an important problem. It is the most important problem."

CONCLUSION

Governmental and non-governmental funders seeking to reduce violence in El Salvador, Guatemala, and Honduras should develop and deploy evidence-informed programmatic interventions as described in this report. As noted previously, these interventions are not the only solution to violence in the region, but they are an important and potentially essential component of a broader successful effort. The findings from our systematic meta-review and field study indicate that, in order to successfully reduce community violence, policymakers should follow the principle of concentration, supported by the imperatives of sound implementation and rigorous evaluation. According to Sherman (2012), "The efficiency of crime prevention can be greatest when resources are concentrated on the power few units… Further support for this principle (and its key assumption) can come from a systematic review of all possible evidence." We believe this report at least partially answers that call. As Sherman anticipated, a broader review of the evidence confirms the commonsense thesis that one of the best, most efficient ways to reduce violence is to account for it specifically and directly.

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ANNEX B: PROTOCOL FOR SYSTEMATIC META-REVIEW ON COMMUNITY VIOLENCE REDUCTION

INTRODUCTION

Our systematic meta-review assessed the effects of interventions aimed at reducing interpersonal violence at the community level by collecting and synthesizing evidence compiled in analytic reviews, meta-analyses and other compendia of scientific findings. The scope of this review was expansive but not exhaustive, incorporating literature from the criminological, behavioral, public health and educational field and reflecting the multidisciplinary nature of the research question. The review was conducted within a limited timeframe of several months, necessitating a focus on sensitivity over precision in the search process.

The review drew upon methodologically sound practices in the areas of information retrieval, assessment and reliability testing. More specifically, the Campbell Collaboration (C2), the exemplar for systematic reviews in the criminal justice field is the inspiration for our review protocols. However, there is noteworthy distinction between the two approaches, namely the unit of analysis – the C2 methodology compiles individual studies into a systematic review while our methodology compiled individual systematic reviews into a single meta-review. The protocols for this meta-review address the (i) search strategy inclusive of eligibility criteria, search terms and sources of information as well as (ii) the systematic coding and analysis of findings including the peer-reviewed tools for assessing the quality of meta-analysis tools.

SEARCH STRATEGY

ELIGIBILITY CRITERIA

Effective analytic reviews are aided by robust eligibility criteria and narrowly defined search concepts[23]. In an effort to be comprehensive and responsive to the open-ended nature of our client's request for information on violence reduction, we chose to focus our search on five related but distinct concepts of crime, violence, victimization, recidivism, and community disorder. We managed the content of the searches generated by employing a strict eligibility criteria as described in Table 1 on the next page.

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[23] Key findings from the Campbell Collaboration brief "Searching for studies: Information retrieval methods group policy brief" retrieved from
http://www.campbellcollaboration.org/artman2/uploads/1/C2_Information_retrieval_policy_brief_new_draft.pdf on July 6, 2015

Table 1: Eligibility criteria for systematic review

Criterion	Description
Topic	Crime, violence, victimization, recidivism, and community disorder
Temporal scope	1990-2015
Geographic scope	North America, Central America, South America, the Caribbean, and Europe
Language	English and Spanish
Research design	Experimental or quasi-experimental
Relevance	Determined from abstract or executive summary

There are three noteworthy features of these criteria. First, the criteria reflect our aforementioned emphasis on sensitivity over precision as our search topics consists of fairly broad concepts commonly used in the violence prevention discourse. Second, the geographic scope prioritizes lesson learning from similar criminogenic environments such as those found in other developing states in Latin America as well as countries that have recent experience addressing levels of violent interpersonal crime with evidence-based interventions such as the United States, Canada and European states. Third, the interest of our sponsoring agency in data-driven, evidence-based platforms for interventions necessitated a focus on research designs that seek to quantify causal effects. We omitted studies that are based solely on qualitative research for this reason. We also omitted studies concerning specialized types of offenders and forms of violence not directly related to community violence (e.g. mentally ill offenders, sex offenders, family/intimate partner violence).

SEARCH TERMS

Search terms should capture the essential aspects of the research component and allow for an exhaustive search of relevant information. For all our source searches, we used the same search terms based on the **study type** (systematic review or meta-analysis) and **topic of interest** (crime, violence, victimization and community disorder). We primarily used the Boolean operators of AND and NOT as well as the standard truncation character of the asterisk (*) to search on a stem word. Finally, we limited search commands, where the source allowed, restricting by date, language and location based on our eligibility criteria. The search terms are depicted in Figure 1 on the next page.

Search strategies evolve as they progress and we anticipate that additional terms may be added, especially for specific search engines. To manage these differences in terms as well as their respective commands and operators we saved our search histories for each source where possible. This will allow for independent replication of our results if necessary to test the sensitivity of our search strategy. In addition, we pilot tested these search terms and assessed the need for alternate terms based on synonyms and variant spelling using the source's thesaurus when available.

Figure 1: Search terms for systematic review

SOURCES

Good search strategies attempt to perform a census of the available research and represent the full range of findings, be they positive or negative. Our search strategy relied heavily on published sources but was complemented by a number of other literature sources to mitigate publication bias (Wilson, 2009; Rothstein & Hopewell, 2009). Our search strategy included the following three types of sources:

1. Bibliographic database sources in the social sciences
   - Subject-specific databases pertaining to criminal justice and public health
   - Dissertations and theses databases
   - National and regional databases
   - Citation indexes

- Grey literature databases
2. Non-bibliographic database sources
    - Hand searches of criminal justice and public health journals
    - Conference proceedings of major criminal justice and public health associations
    - Supplementary information retrieval strategy: Google searches, sponsoring foundations, and government web sites
    - Unpublished studies
3. Expert opinions
    - Criminal justice scholars
    - Public health scholars

BIBLIOGRAPHIC SOURCES

We performed searches with our search terms and their Spanish equivalents in 13 reputable English- and Spanish-language online criminal justice and public health databases.[24] These databases are repositories for peer-reviewed articles as well as theses and dissertations that may have used a meta-analytical methodology in investigating one of our outcomes of interest. The inclusion of 4 Spanish-language databases increases the likelihood of finding evidence available from Central American cases and from similar Latin American contexts. The online databases are listed in Table 2 below:

Table 2: List of Online Databases

English Language Databases	Spanish Language Databases
Criminal Justice Periodical Index	Pais International
The Campbell Collaboration Library	Scielo
The Cochrane Collaboration	Red Alyc
Criminal Justice Abstracts	LAPTOC
ProQuest	
Educational Resources Information Clearinghouse	
Web of Science	
JSTOR	
Medline	

We also used these online databases to perform cited reference searching. This entails reviewing the references of meta-analyses and identifying prior meta-analyses that they may cite. This technique is deemed helpful in instances where different words that could describe our topics of interest were not included in the online database's thesaurus and could have led to eligible studies not being picked up by our searches (White 2009). The Web of Science is one such database that allows us to do cited reference searches and we will also search four other citation indices, namely:

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[24] The English-language databases derive from Campbell Collaboration meta-analysis studies. The Spanish-language databases are included based on their appearance on multiple rankings of top Latin American databases.

Arts & Humanities Citation Index, Science Citation Index Expanded (SCI), Social Sciences Citation Index (SSCI) AND Conference Proceedings Citation Index.

We accessed grey literature derived from government, academics, business and industry sources from 4 data sources, namely: ISI Index to Social Sciences & Humanities Proceedings, CrimDoc, NCJRS Abstracts Database and the Social Science Research Network (SSRN) eLibrary.

NON-BIBLIOGRAPHIC SOURCES

Hand-searching is a labor intensive process but we scanned the Table of Contents of journal issues within our time period to identify potentially eligible studies. This ensured the identification of reviews that had not yet been indexed by the indexing tools. We used our search terms to perform a hand search of ten of the top-ranked criminal justice-related and public health-related journals such as Criminology, Criminology & Public Policy, Journal of Research in Crime and Delinquency, Journal of Criminal Justice, Police Quarterly, Policing, Police Practice and Research, Journal of Quantitative Criminology, Crime & Delinquency and Policing and Society. In addition, we included two of the five highest ranked Latin American journals with criminal justice related content: the Journal of Latin American Studies and Latin American Research Review.

EXPERT OPINIONS

We stored the retrieved studies in the **RefWorks** bibliographic management system. We created two separate files for our eligible and ineligible studies after reliability checks by two reviewers working independently. We then shared our list of eligible studies with noted academia in criminal justice and public health to review the list for completeness. Based on their recommendations, the list of eligible studies was finalized and entered into an Excel file for further analysis.

SYSTEMATIC CODING AND ANALYSIS

Our coding system provided a transparent and basic description of the eligible studies identified by our search strategy. The dataset assigned a serial number to each eligible study. Table 3 on the next page illustrates the main components of the dataset.

Table 3: Coding template for eligible studies

Author(s) country	Research Question(s)	Number of Studies	Contours of Interventions Studied	Effect size	Change in Outcome	Quality	Information on[A]				
							L	P	O	B	M
Winship & Abt Canada	The impact of hot-spot policing on (i) drug trafficking (ii)prostitution	13	Suppression	0.27	-15%	9	X	X	X	X	X

Patino Cuba	The impact on cognitive behavioral therapy on juvenile sex offender recidivism rates	35	Tertiary prevention	0.09	-8%	7	X		X	X	
Wilks Honduras	The effect of Scared-Straight initiatives on juvenile offender arrest rates	7	Tertiary prevention	0.07	11%	6	X		X	X	

[A]Presence of information on five key correlates of location, people, opportunity, behavior and motivation.

The coding system included summative details on each study's characteristics including effect size[25] and reported change in the outcome(s) of interest (%). The dataset has three important components for the purpose of analysis. First, we attempted to summarize the main contours of the studies investigated in each meta-level study. The contours represent general descriptions of the interventions found in the study that can be coded to create a sub-level of data to aid analysis. Second, we assessed the quality of each meta-level study using the AMSTAR tool for methodological quality assessment. As shown in Table 4 on the next page, the tool assesses 11 criteria that can guide how we prioritize evidence when making our recommendations. Third, we investigated each study for the relationship between the outcome of interest and five correlates that we will use when presenting our findings. These correlates can also be used to create a sub-level of coding for data analysis.

Table 4: AMSTAR measurement tool used to assess the methodological quality of studies

Question	Descriptive
Was an 'a priori' design provided?	The research question and inclusion criteria should be established before the conduct of the review.
Was there duplicate study selection and data extraction?	There should be at least two independent data extractors and a consensus procedure for disagreements should be in place.
Was a comprehensive literature search performed?	At least two electronic sources should be searched. The report must include years and databases used. Key words and/or MESH terms must be stated and where feasible the search strategy should be provided.
Was the status of publication used as an inclusion criterion?	The authors should state that they searched for reports regardless of their publication type. The authors should state whether or not they excluded any reports, based on their publication status, language etc.

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[25] Our analysis does not make an attempt to report effect sizes in a comparative manner. Meta-analyses often report on multiple outcomes of interest when addressing their research question and the statistical method chosen to communicate effect sizes also varies among meta-analytical studies. While it is possible in most cases to convert effect sizes to a common method such as a phi coefficient, limited time precluded us from conducting this more robust approach.

Was a list of studies provided?	A list of included and excluded studies should be provided.
Were the characteristics of the included studies provided?	In an aggregated form such as a table, data from the original studies should be provided on the participants, interventions and outcomes. The ranges of characteristics in all the studies analyzed should be reported.
Was the scientific quality of the included studies assessed and documented?	'A priori' methods of assessment should be provided.
Was the scientific quality of the included studies used appropriately in formulating conclusions?	The results of the methodological rigor and scientific quality should be considered in the analysis and the conclusions of the review, and explicitly stated in formulating recommendations.
Were the methods used to combine the findings of studies appropriate?	For the pooled results, a test should be done to ensure the studies were combinable, to assess their homogeneity.
Was the likelihood of publication bias assessed?	An assessment of publication bias should include a combination of graphical aids and/or statistical tests.
Was the conflict of interest stated?	Potential sources of support should be clearly acknowledged in both the systematic review and the included studies.

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ANNEX C: SYSTEMATIC META-REVIEW RESULTS – IDENTIFIED REVIEWS AND ANALYSES

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ANNEX D: PROTOCOL FOR FIELD STUDY ON VIOLENCE REDUCTION

INTRODUCTION

A field study was performed in order to supplement the findings of the systematic meta-review with additional practical guidance concerning implementation and adaptation. This research was conducted in the United States and in El Salvador, Guatemala, and Honduras during a brief but intensive 30-day period. In the United States, we sought to identify and analyze leading examples of evidence-informed interventions in an effort to identify common "elements of effectiveness." In the Northern Triangle, we pursued a deeper understanding of the contexts to which our evidence-informed recommendations would be applied. More specially, we sought to better understand the nature of the violence challenge confronting each country along with the local capacity to adapt and implement evidence-informed solutions.

FIELDWORK STRATEGY

LOCATIONS

In the United States, we performed field research in Philadelphia, Providence, Chicago, Los Angeles, New York, and Boston, in that order. In the Northern Triangle, we conducted research in Tegucigalpa and San Pedro Sula, Honduras; Guatemala City in Guatemala; and San Salvador in El Salvador, in that order.

TIME PERIOD

Field research was conducted between July 23rd and August 21st, 2015, excepting phone interviews and site visits on October 2nd and 7th, 2015.

METHODOLOGY

Field research consisted of subject interviews, site visits, field observations, and document review. In the United States, we selected interventions and sites in consultation with experts and/or the developers of each intervention. In the Northern Triangle, interventions and sites were selected largely by USAID professionals in consultation with us.

We faced significant time constraints and therefore interviewed each subject only once in order to reach a sufficient number of interview subjects. According to Bernard (1988), a semi-format is most appropriate for such interviews. In total, we conducted 51 semi-structured interviews, each approximately one hour in length.

In the United States, our goal was to understand how to identify, adapt, and implement evidence-informed interventions by developing "elements of effectiveness" that such interventions had in common. Consistent this goal, we interviewed a range of subjects for each intervention, including intervention developers, leaders, evaluators, managers, staff, and participants. In each interview, we asked the following questions, with discussion thereafter:

1. From your perspective, what are the key <u>conceptual</u> elements of [intervention name] that drive its success?

2. What are the key <u>operational</u> elements of [intervention name] that are responsible for its success?
3. What are the key <u>contextual</u> elements around [intervention name] that contribute its success?
4. Would recommendations would you offer to someone seeking to replicate [intervention name] in the Northern Triangle?

In the Northern Triangle, a more fulsome understanding of local challenges and capacity for solutions was our goal. We interviewed a broad range of subjects, including representatives from local government, law enforcement, non-governmental organizations, the faith-based community, and community representatives, along with USAID and INL leadership, management, and staff, among others. In each interview, we asked the following questions, with discussion thereafter:

1. Is violence increasing or decreasing in your community? Why?
2. Where does violence occur most frequently?
3. Who are the most frequent perpetrators of violence? Who are the most frequent victims?
4. When does violence occur most frequently?
5. How does most violence occur? What behaviors are responsible for most violence?
6. Why is violence occurring? What motivates the perpetrators to commit violence?
7. Is the violence you see predictable? Unpredictable? How so?
8. What is [organization name] doing to reduce violence?
   - Are you targeting the highest risk places?
   - Are you targeting the highest risk people?
   - Are you targeting the highest risk behaviors?
9. Who are your partners in reducing violence? What additional partners do you need?
10. What is missing from your efforts to reduce? What would improve your ability to reduce violence?
11. Do you use data in your efforts to reduce violence? Why or why not? Would you like to?
12. Do you use research in your efforts to reduce violence? Why or why not? Would you like to?

Consent was obtained from each subject in advance, with assurances that subject confidentiality would be preserved unless permission was granted otherwise. Interviews were memorialized in writing and with audio recordings. Photographs and short video recordings were also taken were feasible and appropriate.

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