

Violent Crime as a Global Development Challenge:
Causes and Menu of Interventions¹

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1 Introduction

Violent crime constitutes one of the most important public policy problems of our times. Nine out of ten violent deaths in the world are intentional homicides occurring outside civil war settings.² This reflection paper reviews the theory and evidence on violent crime. For convenience purposes, we divide the literature highlighting a variety of theoretical approaches that stress different drivers of violent crime. Each of these theories, in turn, suggests different interventions to reduce criminal violence.

After reviewing the crime drivers, the paper presents a menu of interventions, many of which have been shown to reduce violent crime in the US and other developed countries. Fewer interventions have been evaluated in developing world settings. The paper concludes reflecting on how to take existing knowledge from experiences in rich countries to contexts characterized by much greater institutional fragility.

2. The global challenge of criminal violence

Drawing of the Global Burden of Disease (GBD),³ we can highlight three global trends in the incidence of intentional homicides worldwide:

1) Deadly violence has significantly decreased in Africa during the last two decades because many of its civil wars came to an end. Nonetheless, lethal violence related to crime is an emerging public policy problem in the region,⁴ and these challenges will likely increase with rapid urbanization.

2) Latin America and the Caribbean is the most violent region of the world, home to 8 of the 10 most murderous countries and 43 of the 50 most dangerous cities.^{5,6} Moreover, Latin America and the Caribbean is the region of the world where a largest proportion of homicides are carried out with firearms.

² Data from the Geneva Declaration of Armed Violence and Development, based on the Global Burden of Armed Violence reports, released in 2008, 2011, and 2015 (<http://www.genevadeclaration.org/the-geneva-declaration/what-is-the-declaration.html>)

³ GBD is a

⁴ South Sudan, South Africa, Nigeria, Angola, Kenya, Namibia, Lesotho, Swaziland, Botswana, Tanzania, Somalia, Equatorial Guinea, Nigeria, Democratic Republic of Congo, and Rwanda are some of the African nations where criminal violence have become endemic.

⁵ According to data for 2015 from the Mexican NGO *Consejo Ciudadano para la Seguridad Publica y la Justicia* (CCSP).

⁶ With a few exceptions, Latin American and Caribbean countries are experiencing murder rates the World Health Organization (WHO) classifies as “epidemic,” and a variety of countries and cities have homicide rates equivalent to “conflict” levels. According to the WHO, homicide rates above 40 per 100,000 are equivalent to “conflict levels;” murder rates above 10 and below 40 are considered as “crime epidemics.”

3) Asia stands out as a relatively peaceful region, with the lowest homicide rates and shares of murders committed with firearms. ⁷

There are some important differences between the incidence of crime-related and civil war violence. Poorer countries are more likely to experience civil war (Collier, 2000; Fearon and Laitin, 2003; Blattman and Miguel, 2010). In contrast, in the case of violent crime and murder, middle-income countries appear to be at higher risk.

Unlike civil war violence, that primarily affects areas the state finds hard to reach –including jungles or mountainous terrains (Fearon and Laitin, 2003) as well as areas rich in natural resources (Collier and Hoeffler, 1998, 2000), criminal violence disproportionately affects cities. This form of violence is propelled by the economic value of potential targets, and with added economic activity and trade, cities have more prominent targets than rural villages.

In terms of who is most affected by homicides worldwide, women are far less likely to be murdered than men. This does not imply that violence against women is unimportant. Most female violent deaths occur to young girls ages 1 to 14. Intra-family and sexual violence are important drivers of everyday violence against women (Fearon and Hoeffler, 2014). However, worldwide, young men become particularly vulnerable to victimization starting at 15 years old, and this risk only declines gradually past 44 years old (Magaloni and Diaz-Cayeros, 2017).

Adult criminals start delinquent behavior during adolescence, intensifying in the middle teen years and reducing thereafter (Moffitt, 1990, 1997; Caspi, & Moffitt, 1995). Moreover, it seems that violent criminal behavior typically starts with relatively minor offenses. These actions later escalate in frequency, severity, and variety (Loeber et al., 1998; Tolan et. Al, 2003).

These three features together imply that young men in countries with intermediate levels of development living in urban settings should be at the center of crime and violence prevention strategies. Women and children, as well as rural dwellers might also experience criminal violence, but policies addressing their protection might need to be different from those targeted towards young men.

3. Crime drivers

There is a vast literature on criminality. We review in this section the theories and drivers of violent crime.

3.1. *Economic causes of crime*

The focus on economic factors builds on the rational choice perspective wherein criminals respond to economic incentives (Becker 1968; Stigler 1970). According to this theories, propensity to engage in crime for an individual increase as his or her opportunity cost of engaging in legal opportunities reduces, therefore increasing the attractiveness of criminal behavior. Some of the economic factors scholars have argued

⁷ There are exceptions, including Papua New Guinea, Mongolia, Bangladesh, Malaysia, and Thailand, where the incidence of violent crime is considerable.

that predict crime are poverty, lack of economic growth, youth unemployment and lack of education. These factors fuel crime because they decrease the financial benefits potential perpetrators can expect from available legal opportunities.

Across countries, the relationship between poverty and violent crime is probably U-shaped, suggesting that the process of development might be criminogenic. Soares (2004) warns us, however, that the apparent positive relationship between development and murder rates might result from under-reporting in poor countries and those countries with deficient rule of law institutions.⁸

Empirically, economic growth seems to predict robbery and theft better than homicides (Fainzylber, Lederman, and Loyza, 2002a, 2002b). Unemployment rates do not correlate well with homicides (Levitt, 2004; Raphael and Winter-Ebmer, 2001).

Income inequality appears to be strongly associated both with high crime and murder (Fainzylber, Lederman, and Loyza, 2002a, 2002b; Kelly, 2000; Soares, 2004). However, some scholars find little support for this relationship (Neumayer, 2005; Bourguignon; 2001; Brush, 2007; Pridemore, 2011).

The problem of invoking inequality as a cause of violent crime is that it seems to correlate with violence across countries but it does not correlate with violence over time *within* countries (Bush, 2007). Possibly the real cause of violence is not inequality per se, but some stable features about unequal societies, including a lack of state presence and police in poor neighborhoods, where citizens are often abandoned to a state of anarchy (Pinker, 2012).

An important implication of the stylized association between inequality and violent crime is to highlight the role of opportunities for disadvantaged youth as a critical element in prevention programs. Another implication relates to uneven state presence in wealthy and poor communities, as we further elaborate below.

3. 2. *Socio-psychological factors*

At the individual level, a combination of biological factors,⁹ pre- and peri-natal conditions, adverse child rearing conditions, and hostile social environments set individuals into different criminal trajectories.

The most commonly reported risk factors that predict youth crime include childhood antisocial behavior; low self-control (impulsiveness, hyperactivity, a poor ability to plan ahead, etc.); low levels of parental supervision; harsh and inconsistent discipline; child maltreatment (abuse and neglect); offending by parents and siblings and parental conflict; drugs addiction and alcoholism among the parents; large family size; and weak parental and school attachment (Farrington, 2002; Homel, 2005).

⁸ Although the Global Burden of Disease data might help overcome some of these problems, we share Soares' (2004) cautiousness regarding the possibility to derive solid conclusions about the income correlates of crime at a global scale.

⁹ There is increased evidence demonstrating a link between brain impairment and crime; this link may be explained by a reduction in impulse control, impaired ability to learn consequences of actions, and depressed feelings of empathy for potential victims (Glenn et al. 2009). A promising line of research further demonstrates that abnormal brain function is shaped in part by social environment and malnutrition. Other factors include in utero drug or alcohol use (Streissguth et al. 2004), abuse in early childhood (Perry et al. 1995), and exposure to lead (Canfield et al. 2003). Maternal malnutrition has also been associated with later antisocial behavior on the part of the child (Liu et al, 2004).

The scholarly literature suggests that the number of births to broken homes under disadvantaged socioeconomic conditions rather than cohort size is relevant to explain crime.¹⁰ This is the logic behind Donohue and Levitt (2001), who argue that the legalization of abortion in the United States was one of the main reasons behind the reduction in crime rates observed in the 1990s.

A similar argument has been applied to understand the crime epidemic in Brazil. Hartung (2006), for example, argues that the increase in crime rates starting in the end of the twentieth century was the result of reductions in child mortality rates in the low socioeconomic strata twenty years beforehand.¹¹

In terms of interventions to control crime, psychological theories of crime suggest that desistance from crime activity requires both personal change (reasons to change attitudes, values, and self-control) and support for change within the family, the school and the community (promotion of positive social ties). Attachment to school, mentors and positive peer influence may provide troubled youth with a link to mainstream beliefs and values, and with opportunities to participate in supportive social activities.

3.3. Community factors

A striking regularity of violent crime is its high concentration in certain neighborhoods. Sociological theories of crime have argued that the concentration of crime in certain neighborhoods as well as its persistence suggests “places” rather than “kinds of people” breed crime (Shaw and McKay, 1942).

Sociologists noted the co-occurrence of crime and other social ills, including family disruption, weak social ties, ethnic heterogeneity, and high residential turnover. These social pathologies produce little formal control and lack of social cohesion, making these communities more vulnerable to crime (Sampson, 1986).

Other aspects of the urban environment such graffiti, vacant lots, garbage, prostitution, alcohol and drug consumption, street fights, and a tendency to engage with neighborhoods violently are seen as consequences of social disorganization. The theoretical proposition is that social disorder and decay generate fear and weak communities, and create an environment that is likely to encourage crime (Sampson, 1986).

Although not sufficiently underscored by social disorganization theory, it is important to emphasize that the roots of many of these social pathologies must be found in broader patterns of interaction with the state, including the police, courts, schools, health providers, and social welfare programs.

¹¹ Pinker (2011) forcefully argues against these arguments. In his view, the proportion of unwanted births might even have increased with legalization of abortion in the US, as couples may have treated abortion as a backup method of birth control and may have engaged in more unprotected sex. This may help explain why the proportion of children born to women in the most vulnerable categories –poor, single, teenage, and African American – did not decrease in the years since 1973. Moreover, studies that pit the effects of parenting against the effects of children’s peer environment, holding genes constant, demonstrate that the peer environment almost always wins (Pinker, 2011: p. 121; Wright and Beaver 2005).

The absence of the state is what often leads to the development of social pathologies, including a culture of violence. When the state fails to provide a legitimate system of legal retribution, taking justice on one's hands is a common option (Black 1983). Perceptions that the police and courts are illegitimate, unresponsive, and ill equipped to ensure public safety likely incline individuals toward violence simply because they feel they cannot rely upon formal systems of justice to solve disputes.¹²

Moreover, when the state fails to provide a legitimate and effective system of legal retribution, violence can easily become 'contagious', where a desire for revenge and anger constitute sources in its transmission (Pinker, 2011). Studies of American street violence have found that young men endorse a "code of honor" based on the belief that one must cultivate a reputation for willingness to defend oneself against aggressions. Walking away from a fight displays weakness to others, which may increase the risk of future victimization.

A recent epidemiological analysis of a network of almost 140 thousand individuals in Chicago, Illinois, determined that social contagion was responsible for 63.1% of the more than 11 thousand gunshot violence episodes that occurred between 2006 and 2014 (Green et al., 2017).¹³

Lastly, criminologists have further proposed to explain crime as a socialization process (Sutherland, 1947; Burgess and Akers; Akers, 1998).¹⁴ Experiments in psychology have supported the core theoretical propositions of behavioral learning theories – that human behavior even when focusing on deviant behavior such as cheating and aggression -- is responsive to learning principles such as modeling, reinforcement and punishment (Bandura et al. 1963).

The literature focuses on the role of gangs as the most important socializing space for criminal activities. Numerous studies conducted in developed countries have found that gang members share key risk factors, including violent victimization at home, poor parental supervision, substance abuse, poor educational or employment potential, interaction with delinquent peers, failure attaching to conventional social institutions, and high crime, poverty, and social disorganization in their neighborhoods (Howell and Egle, 2005).

Low education levels have been found to be one of the strongest correlates of gang membership in Medellín, Colombia (Baird, 2012) and Rio de Janeiro, Brazil (Carvalho and Soares, 2016). Souza e Silva and Urani (2006) analyzed panel data on youths (11-24 years of age) involved in drug trafficking gangs in Rio de Janeiro. Factors explaining entry into drug trafficking are economic burdens and lack of access to the labor market due to low levels of education – half of sample dropped out of school before entering high school. Besides money, their study found that youth enter and remain in drug trafficking activities to gain status and recognition, or to fulfill certain emotions –

¹² These perceptions are what Kirk and Papachristos (2011) call a form of "cultural legal cynicism"

¹³ Criminal retaliation linked to the sale and distribution of crack is a critical factor accounting for systemic increases in violence experienced in American cities between 1984 and 1991 (Rosenfeld 2000; Jacobs, 2000). Retaliation has also been proven to be an important mechanism of settling scores among youth gangs (Decker and Winkle, 1996; street level drug dealers and organized criminals (Arlachi, 1987).

adrenaline. Strong friendships with other members of the group are an important factor for permanence in this activity.

There are various implications of these theories related to how crime prevention polices should be designed. An important implication of the sociological theories is that crime-prevention interventions should target neighborhoods, not only individuals. Improvements to services (e.g., cleaning graffiti; adding additional lighting for public spaces; building schools and recreation areas; etc.) are argued to be important to combat social disorganization and empower the community. Moreover, crime prevention strategies should also aim at increasing the presence of the state and the legitimacy and acceptability its security institutions among the community.

Additionally, one of the most important policy implications of these theories is that violence prevention efforts that consider social contagion are better at preventing homicides than efforts based on demographics alone (for example age, sex, and neighborhood residence) (Green et al, 2017; Papachristos, 2011; Branas et al, 2017).¹⁵ Murder prevention, that is, should focus on targeting those individuals that are interconnected by social violent networks and who are most likely to kill or be killed as a result of vendettas. Finally, crime prevention policies should focus on developing “protective” factors for youth not to join gangs and start on a trajectory of delinquency.

3.4. *The role of space and routine activity theory*

The spatial and temporal organization of society and the circulation of people and property affect patterns of crime, including its concentration in certain locations, its association with certain activities and its occurrence at certain times.

Rather than emphasizing the characteristics of offenders or community pathologies, routine activity theories concentrate upon the circumstances in which they carry out predatory criminal acts. Most criminal acts require convergence in space and time of likely *offenders*, *suitable targets* and the absence of *capable guardians* capable of preventing violations (Cohen and Felson, 1979).

One of the most important findings of this line of criminology research is that crime is highly concentrated in a small number of places during high-risk times.¹⁶ Empirically, crime in US cities is concentrated on around 5% of the street corners that generate more than half of all criminal events (Sherman et al. 1989; Weisburd et al, 1992). The spatial concentration of violent crime holds on other areas of the world (see Mejia, Ortega, and Ortiz (2013)). Moreover, violent crime is also perpetrated by a relatively small number of very risky people (Braga and Weisburg, 2015). Spelman and Eck (1989) examined several studies and estimated that 10 percent of offenders are involved in over 50 percent of crimes and 10 percent of places are the sites of about 60 percent of crimes.

Beyond observing clustering, Eck and Weisburd (1995) identified other concepts that illuminate the role of space in crime such as site features, including easy access, a lack of guardians, and the presence of valuable items. Moreover, taverns, schools, fast-food restaurants generate violence depending on who attends to them and how they are

managed. Crack houses and open-air drug markets are a major source of violence (Eck and Weinsburg, 2015).

As we will explore below, the observation that crime is geographically clustered in few street corners has inspired the “hot-spot” policing strategy, which has been the subject of many randomized impact evaluations.

3.5. Drug-trafficking violence and organized crime

It is impossible to leave aside drug trafficking and organized crime, which are major factors explaining the exorbitant murder rates in some countries of the world, including Honduras, Venezuela, Guatemala, Mexico, Brazil, and Colombia. Collier (2000) claims that the critical distinction between criminal violence and rebellion lie on a substantial divergence in the industrial organization of crime and insurgency, “the former organized at a small scale and the latter at a large scale” (p. 853). This is because the industrial organization of violent rebellion, according to him, is organized to predate against natural resources instead of household wealth.

However, when the potential profit of the illicit activity is extremely large, as is the case with international drug trafficking, criminals possess incentives to organize into large-scale organizations.¹⁷ The capacity for violence of this type of industrial organization can equate or even surpass that of civil war.

Because of their constant stream of income, drug cartels can recruit thousands of young men and purchase powerful weapons to fight rival drug cartels and to confront the state. Drug-related violence mostly results from confrontations between drug trafficking organizations (DTOs) that violently dispute control of valuable territories because of their suitability to cultivate drugs. DTOs also fight for territorial control of drug trafficking routes (e.g., ports and border crossings, high-speed highways, airports, etc. (Calderón et al., 2015). DTOs can also turn violent against the state, engaging in terrorist-like activities to influence policy in their favor (Lessing, 2015).

Although much of the homicides result from cartel-on-cartel violence, DTOs can also turn violent vs. the general population, diversifying their portfolio of criminal behavior into extortion, human trafficking, sexual violence, kidnaping, and murder (Guerrero, 2011; Calderón et al., 2015).

Policies that prohibit the use, possession, production, and trafficking of illicit drugs necessarily enhance incentives for drug traffickers to bribe and co-opt the state. The adage “Plata o Plomo” (silver or lead) encapsulates this approach to doing business: a drug cartel or criminal group will force the state to cooperate by means of either a bribe or a bullet (Lessing, 2015). The resulting institutional equilibrium might be one where law enforcement agents can even end up serving as executioners of the mob (Grillo, 2012).¹⁸ This is another reason DTOs impose enormous challenges to the state by corrupting and weakening law enforcement and other state institutions. Reducing violence in these settings strongly depends on capacity to strengthen the state and purge it from corruption.

¹⁷ The U.S. State Department estimates that the American drug market is worth about \$60 billion a year, of which about half of the total, or \$30 billion, goes to Mexican drug cartels (Grillo, 2012).

4. Interventions

Below we discuss a menu of interventions. To simplify the exposition, we classify them according to whether they are predominantly preventive versus coercive.¹⁹ Risk-focused prevention refers to the identification of risk factors for offending and the implementation of prevention strategies designed to counteract them (Murray and Farrington, 2009; Farrington, 2000). Risk-focused prevention strategies also aim at identifying key protective factors to integrate them in their models.

Coercive strategies emphasize arrest, punishment, and incarceration in order to isolate perpetrators. Coercive strategies most often involve the police, which play a combined role of prevention and repression. Coercive strategies also involve the criminal justice system more broadly. As we will see, the most successful strategies to prevent violent crime involve a combination of risk-focused prevention and coercion.

4.1 Risk-focused interventions

Risk-focused prevention programs can be targeted to the individual, family, school and community. At the individual level, risk-focused prevention projects focus on developing self-control and reasons to change. At the family level, projects mainly seek to develop healthy positive relationships with family members. At the school level, they encourage improved academic achievement and reduce the dropout, as well as disengagement from peers with anti-social attitudes and beliefs, including youth gangs. Finally, at the community level, programs seek to address the problem of social disorganization and to increase the presence of the state in marginalized communities.

- Early childhood and family interventions

Early childhood family interventions draw from the socio-physiological theories of crime that argue that early childhood experiences are critical. Typically, these interventions involve parent education and counseling programs that provide management training, functional family therapy, or more general advice and guidance to parents (Welsh, 2010).

Enthusiasm for early-childhood intervention came from projects evaluated through the use of Randomized Controlled Trials. Piquero and Diamond (2016) conducted a meta-analysis of randomized or well-controlled experimental studies of family-based crime prevention programs in the US. The mean effect size was 0.32 that translates into a decrease in offending from 50% in a control group to 34% in treatment group.

¹⁹ Another way to classify interventions is based on the type of prevention proposed. Primary prevention seeks to intervene on the population in general, secondary prevention is limited to at-risk groups, and tertiary prevention is aimed at individuals and groups who have been directly involved in acts of violence, whether as victims or perpetrators (Abt, 2016).

In Latin America, there is also some evidence suggesting that improving direct parent-child interactions during the earliest years produces better life outcomes, including reduced violent behavior (Getler et al., 2014; Walker et al., 2011). A Randomized Control Trial (RCT) in Kingston, Jamaica, indicated that participants who received the psychosocial intervention reported less involvement in fights and in serious violent behavior compared to those who did not receive home visits.²⁰ They also displayed higher adult IQ and higher educational achievement, as well as fewer symptoms of depression and social inhibition (Walker et al., 2011).

One challenge that has long confronted early prevention policy is the matter of “scaling-up”. When a program is expanded, there are problems that range from targeting a more heterogeneous population, to lack of availability of resources to meet the demands of a large-scale program, and the loss of program fidelity. In a meta-analysis of various studies conducted to evaluate the effectiveness of early-childhood development programs relative to other policies, including incarceration, Piquero et al., (2009) conclude that while there is robust empirical support for the attenuation of effects when early prevention trials are taken to scale, the literature demonstrates that “attenuation is never 100% nor uniform across outcomes.”

- Cognitive behavioral interventions

Drawing from psychological theories of crime that stress lack of self-control, impulsivity and anger as causes of criminal behavior, experimental evaluations suggest that there is an important role for cognitive-behavioral interventions that attempt to increase self-control and reduce youth propensity to respond to situations without thinking.

One of the most recent large-scale randomized control trials was conducted in Chicago. Becoming a Man (BAM) seeks to encourage low-income youth to think and reflect before reacting has shown powerful results. A first RCT conducted in 2009-10 had positive effects on schooling outcomes and reduced violent crime by 44%. A second RCT reduced overall arrests by 31% and a third one conducted in a Juvenile Detention Center in 2009-11 reduced return rates by 21% (Heller et al, 2017).

In a meta-analysis of 14 randomized experiments of the effects of cognitive behavioral therapy (CBT) on the recidivism of adult and juvenile offenders, Lipsey and Landenberger (2006) found that the most important factor related to the effects of CBT on recidivism was whether the intervention was carried out as part of a research and demonstration project. Research and demonstration projects were more than four times more effective than the routine practice projects, for a reduction in recidivism rates of 49% versus 11%, a significant difference. Treatment effectiveness appeared to be mainly a function of the quality of the CBT provided.

²⁰ Low-income children aged 9 to 24 months participated in a 2-year intervention. Study children were randomly assigned to one out of four groups: weakly nurse home visits to improve parent-child interactions and promote psychosocial stimulation; nutritional supplementation; both home visits and nutritional supplementation; and a control group. At the age of 22 years old, 105 of the study participants were assessed in terms of IQ, educational attainment, and behavior.

Although CBT produced significantly better results in research and demonstration, the meta-analysis by Lipsey and Landenberger (2005: 69) suggests that effects of routine practice CBT programs can in practice approach those produced in R&D projects “if they were implemented well by appropriately qualified personnel and closely monitored. These conclusions were confirmed in an expanded meta-analysis involving 58 experimental and quasi-experimental studies of the effects of CBT.”

- Community-based interventions

Many antiviolence initiatives target neighborhoods rather than individuals with programs to improve public spaces and infrastructure, have police engage more with the community, clean up debris, and reduce social disorder.

The *Moving to Opportunity* experiment is one of the few attempts to study the effects of randomly assigned neighborhood conditions (Kling, et. Al., 2007; Katz et al., 2001). The study was conducted among publicly housed families from poor urban neighborhoods in 5 US cities, where the treatment was an opportunity to move away from poor neighborhoods via a housing voucher.

The results have been mixed. Although female youth from families that received vouchers to relocate experienced declining involvement in violent crimes, male youth also experienced more conduct disorder and other problem behaviors, including property crime arrests (Kling, et. Al., 2007; Katz et al., 2001).

A key limitation of *Moving to Opportunity* is that the neighborhood effects are moves to new neighborhoods rather than changes in current neighborhoods. The study cannot disentangle the potentially disruptive effects of a residential move from the potentially beneficial effects of living in a less impoverished neighborhood (Cerdeña et al., 2012).

There is quasi-experimental evidence that public works projects can reduce crime. Cerdeña et al. (2012) evaluate a famous large-scale public works project targeted to very poor neighborhoods from a Medellín, Colombia, where in 1991 the city’s major invested to improve the quality of services and promote urban development, including through a cable-propelled transit system (gondola) known as Metrocable. Other improvements included additional lighting for public spaces; new pedestrian bridges and street paths; “library parks”; buildings for schools, recreational centers, and centers to promote microenterprises; more police patrols; and a family police station next to a gondola station.²¹

- School-based interventions

²¹ The authors report that the drop in homicide between 2003 and 2008 was 66 percent higher in intervention neighborhoods than in control neighborhoods. Moreover, the authors also show improvements in neighborhood conditions that might contribute to reductions in violence, including collective efficacy, citizens’ trust in the criminal justice system and reliance on police, and the availability of neighborhood amenities such as parks and cultural activities.

Schools represent the most critical “protective” factor, especially when kids reach the teenage years. Teenagers not only spend a significant proportion of their time in school, they are also at a developmental age in which they become more disposed to joining gangs and offending.

In the US about 41 percent of inmates in state and federal prisons have less than a high school education. Schooling significantly reduces criminal activity. According to the National Education Association, increasing the high school completion rate of men ages 20–60 by one percent would save the U.S. as much as \$1.4 billion per year in criminal justice costs.

School based interventions can be classified according to whether they focus on: a) reducing dropouts; b) addressing cognitive and behavioral problems; c) giving cash and other financial incentives to keep kids and school and help them graduate; d) afterschool programs and e) peer mentoring programs.

The bulk of the empirical evidence suggests that it is necessary to adopt a multi-dimensional approach to reduce school dropouts. Dropping out is a long-term process of educational withdrawal preceded by chronic absenteeism, problem behavior, or course failures (Evelo, 1996). To reduce dropouts, it is necessary to provide highly targeted, individualized interventions focused primarily on boosting students' engagement in school.²²

On the other hand, some school interventions are designed to prevent criminal, substance misuse and many of the antecedents of delinquency, such as truancy and other behavioral problems. According to Wilson et al., 2001, school-based programs vary a lot in terms of the services provided, including instruction for students such as life skills training, behavior modification and teaching thinking strategies, counseling and mentoring, recreational, enrichment, and leisure activities.²³

Outside the US, a rigorous evaluation of a school-based violence prevention program was conducted by Chau (2012) in Colombia.²⁴ The results show positive impacts on violence reduction (See Moestue, Moestue, and Muggah, 2013).

²² In the US, interventions collectively known as the "ABC Projects," were designed not only to provide direct services to students but also to improve connections between homes, schools, and communities (Thurlow, 1995). Two of the projects, ALAS and Check & Connect, achieved impressive results.

²³ Some of these programs have been evaluated through RCTs, showing positive results. For example, the Seattle Social Development Project (SSDP) carried out by Hawkins and his colleagues (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999; Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999). Another evaluation involved a school and community-based intervention conducted in high-crime neighborhoods of Chicago that included an after-school program to enhance pro-social adult skills and in-school cognitive behavioral therapy (CBT), designed to reduce common judgment and decision-making problems related to automatic behavior and biased beliefs (Heller et al., 2013). A third example was the Children at Risk (CAR) program, a comprehensive community-based prevention that targeted high-risk adolescents (average age, 12) in poor neighborhoods of five cities across the United States. One of the challenges of these sorts of multi-dimensional programs is that it is hard to tell what of all the services causes the strongest effects.

²⁴ The program, Aulas de la Paz, consisted in implementing curricula in classrooms to teach kids conflict-resolution techniques, coupled with workshops and home visits for parents focused on conflict-resolution skills and protocols for identifying and handling risky behaviors. For children displaying high levels of aggressive behaviors, additional weakly extra-class time was provided to promote pro-social skills. A large sample of more than 1,000 students in 27 schools from 4 geographical zones were randomly assigned into treatment or control groups.

After-school programs, for their part, are aimed at reducing at-risk youth's involvement in delinquent behavior in the community, providing pro-social opportunities for young people in the after-school hours. Services can be categorized in recreation, academic, and skills training. Reviews on the effectiveness of after-school programs indicate mixed results on reducing delinquent behavior (Welsh and Hoshi, 2002; Taheri and Welsh, 2015; Gottfredson et al., 2004).²⁵

- Job training programs

Vocational skill training programs have been an enduring crime control policy. Vulnerable youth commonly experience stagnating educational attainment, high unemployment, limited access to high-quality jobs, and they are at greater risk of becoming affected by criminal violence. A number of studies investigate the extent to which job training programs increase employment and most find very positive results.²⁶

While labor market performance-related indicators are the main intended outcomes for, there is a growing body a research analyzing the effects of youth training programs on other policy-relevant behavioral outcomes, such as teenage pregnancy (Ibarraran et al. (2014), use of consumer credit (Alzua, Lopez & Lopez, 2015). In the Unites States, Heller (2014) found new evidence that a summer job programs can reduce youth criminal activity. Significantly more research is needed to understand if job training programs can influence the prevalence of risk-prone behavior, including criminal activity, recidivism, and gang desistance.

In terms of recidivism, Wilson and Gallagher (2000) conducted a meta-analysis of the outcomes of 53 different education, vocation, and work programs. These reviews concluded that education programs increase employment and reduce recidivism. Wilson et al. (2000) conducted another meta-analysis of 26 studies evaluating the effectiveness of vocational and work programs, including prison industries. Vocational training was found to increase the employment rates and reduced recidivism rates.

Overall, in terms of risk-focused prevention strategies is worth referencing Greenwood et al (1998), who conducted a cost-benefit analysis of four approaches to lure children away from criminal careers in the United States: home visits by child care

²⁵ Gottfredson and her colleagues (2004) noted that, among a small number of experimental and quasi-experimental studies, high quality programs that involve a heavy dose of social competency skill development can be the most effective ones.

²⁶ An experimental evaluation of *Jóvenes en Acción* (Attanasio et al., 2011), a six-months vocational training program targeted to unemployed Colombian youth (aged between 18 and 25) from poor households, shows positive effects on women's wages and labor force participation. Further, Card et al. (2011) and Ibarrarán et al. (2014) conducted randomized controlled trials to investigate the impact of *Programa Juventud y Empleo* from the Dominican Republic. Both studies found small effects of *Programa Juventud y Empleo* on employment, and very small impacts on wages for those employed. Alzua, Cruces & Lopez (2015) conducted an experimental evaluation of *Entra21* implemented in Cordova, Argentina. They found that *Entra21* yields a statically significant increase in formal employment right after program participation, although the average impact vanishes after 24 months. Magaloni et al., (2017b) found in their analysis of a vocational training program in Mexico, *Jovenes con Porvenir*, had a positive and statistically significant effect on the probability of getting a job, monthly income, hours of labor per week, access to professional networks. The effects were of greater magnitude among participants under 23 years of age, males, and residents of highly marginalized areas.

professionals to provide guidance in infant and child care; parent training and therapy for families with primary-school age children who have shown negative aggressive behavior; cash and other incentives to induce disadvantage high school students to graduate; and monitoring and supervision of high school at youth who have already exhibited delinquent behavior. The authors find that graduations incentives might reduce crime the most.

4.2 Coercive interventions

Police are important to deter crime because they increase the probability of criminals being caught and sanctioned (Becker, 1968). A series of experimental and quasi-experimental studies have shown that the police can be effective in preventing crime (Braga, 2001 and 2005; Skogan and Frydl 2004; Weisburd and Eck 2004). Durlauf and Nagin (2011) argue that increasing the visibility of the police by hiring more officers and by allocating existing officers in ways that augments the perceived risk of apprehension is an effective way to reduce crime. They conclude that crime prevention would be improved by “shifting resources from imprisonment to policing” (2011:9-10). Indeed, the bulk of the empirical evidence suggests that punishment certainty is far more consistently found to deter crime than punishment severity.

Below, we review some of the main findings regarding a variety of policing strategies to reduce crime. We also discuss some of the main findings regarding incarceration.

- Broken Windows

Broken Windows gained attention in the public debate after the approach was adopted in New York City in the 1990s as a form of tough policing with no tolerance for minor manifestations of “social disorganization.” Ultimately a vast body of research on policing strategies in New York can’t make a compelling argument for the effect of police on the systematic drop in crime rates in the 1990s. Overall the evidence seems to point out to a conclusion that “combating public disorder and decay with tough police tactics may be a weak strategy to reduce crime” (Harcourt and Ludwig, 2006).

- Focused deterrence (*Operation Ceasefire*)

The “focused deterrence” framework, often referred to as “pulling-levers policing,” has become a landmark for reducing gang violence and homicides across the US (Kennedy, 1997, 2006, 2008; Kennedy, Piehl, and Braga, 1996; Braga, et al, 2001; Braga, 2013).

The program departed from Operation Ceasefire, a strategy used to control Boston’s gunfire problem in the 1990s. The strategy is a form of problem-oriented policing where the police reach out to gangs and other community organizations – parents, churches, community leaders, etc. The police participate in meetings with the community, where youth that have been previously identified as being at risk of being shot or killing someone are also present. Other actors usually involved are parents of

victims of gun violence, former offenders who reflect about their life experience, police patrol officers, FBI officers, and social service representatives. The intention of the meeting and direct patrol encounters is to deliver a message that murders would evoke and immediate response and would sent the offender --and potentially his friends -- directly to jail. In the town hall meetings, youth are offered opportunities to engage with social workers and community organizations to engage with the community in healthier ways and, helping them find jobs and educational opportunities or accessing other “life changing” alternatives (for example, cognitive behavioral treatment, graffiti removal, etc.)

It has been difficult to evaluate the strategy with the gold standard of an RCT. Quasi-experimental studies suggest that the strategy had a lot to do with the drop in violence in Boston (Butterfield, 1996; Phiel et al. (2003) Braga et al. 2001). Although uncertainty about effect sizes, the scholarly work tends to conclude that Ceasefire is associated with significant reductions in youth violence (Braga, 2013; Braga and Weisburg, 2-12; Cook and Ludwig, 2006; Wellford et al, 2005).

- Hot spot policing

There is experimental evidence from US cities demonstrating that targeting police resources against the highest-crime “hot spots” can help prevent criminal activity (Durlauf and Nagin, 2011; Skogan and Frydl, 2004; Weisburg and Eck 2004; Farrington and Brandon, 2005).

Various RCTs have been conducted to evaluate the impact of hot spot policing in the US. In the experimental studies, the units of analysis were crime hot spots or high activity places smaller than a neighborhood (buildings, bars, schools, subway stations, airports). In most studies, research teams defined hot spots by mapping official police data to identify high volume areas and use police observations to define hot spot boundaries (Sherman and Weisburg, 1995; Weisburg and Green 1997; Braga et al, 1999).

In a meta-analysis of hot spot policing, Braga (2007) reports that seven of the nine selected evaluations reported crime and disorder reductions. He also reports limited crime diffusion effects, although there are serious difficulties in measuring these. He also reports lack of insight from these studies into which enforcement strategies are more effective.

A second meta-study by Papachristos, Hureau, and Braga (2012) analyzed 19 studies, yielding mixed results: i) hot spot policing generates moderate crime control gains; ii) they are likely to produce diffusion of crime into areas immediately surrounding targeted high-activity places; iii) problem-oriented policing is identified as a preferable strategy for reducing crime relative to simply increasing visibility or arrests.

A recent study was conducted in Bogotá, Colombia, by Blatman and collaborators (2017). The study finds moderate effects on crime and slightly stronger effects on violent crime, especially in the most violent areas of the city. Their study also suggests that hot-spots policing might be more effective when it is jointly implemented with a “public goods” strategy that aims at improving the presence of the state through activities such as garbage collection, cleaning graffiti and affecting other manifestations of social disorganization.

On the other hand, an important line of research has suggested that simply increasing police presence might not always result in positive community perceptions and might cause tensions between the community and the police. Hot spot policing can do harm when officers stop too many people, which can undermine community trust (Fagan, Geller, Davies, and West, 2010).²⁷

- Problem-oriented policing: the case of Plan Cuadrantes in Colombia

Problem-oriented policing aims at developing problem-solving skills among police officers that would allow them to get to know the key actors in the community (NGOs, community leaders, churches, schools) and work together with them to identify security problems and confront these in specific geographic areas. Problem oriented policing hence has strong elements of community policing (Goldstein, 1990; Weisburd, McElroy, and Harddyman, 1988; Weisburd and Eck, 2004; and Weisburd et al. 2008).

Weisburd et al. (2010) identified 10 eligible studies, none of which were randomized control trials, and the results were mixed, showing moderate impact on criminal violence. As Abt (2016) points out, problem-oriented policing appears to improve the performance of other policing strategies, such as hot spots.

An important randomized evaluation of this approach was conducted in Colombia, where the Plan Nacional de Vigilancia Comunitaria por Cuadrantes (“Plan Cuadrantes”) was introduced. The Plan seeks to transform the way in which patrol policing is carried out as well as to improve the relationships of police officers and the community.

Inspired by problem solving policing strategies, the Plan provided training for over 9,000 police officers to be able to implement new protocols and enhance their accountability and interaction with the communities. Eight cities were divided into small geographical areas (Cuadrantes) and six officers were assigned to each.

Garcia, Mejia and Ortega’s (2013) collaborated with the Colombian National Police to implement an impact evaluation of the Plan Cuadrantes by staggering the training program between three randomly chosen cohorts of police stations, generating experimental variation in the exposure to training and implementation of the Plan. The sample included 105 stations with 39 in the first cohort, 32 in the second cohort, and 34 in the third cohort. Training lasted 7 weeks for each cohort. Comparing the 4 months immediately after training with the same months from the previous years, they found a significant reduction in several types of crime attributable to the training program. The effects for homicides are driven by very large effects in high crime areas and nearly zero effects on low crime areas. Once the spatial concentration of crime is taken into account, overall reduction in the number of homicides was about 22%.²⁸

Although the results provide encouraging findings about the role of problem-solving

²⁷ Importantly, the approach has been criticized for targeting minorities and the young in specific neighborhoods. The strategy has strained police-community relations –for example, almost 40% of black respondents said they had been treated unfairly by the police compared to just 22% among whites (Weitzer and Tuch, 2006).

²⁸ The authors attribute the reductions in crime and homicides to the police-training program rather than the change in the police deployment scheme, which they argue is common to all areas in treatment and control stations. However, it is unclear if the reduction in homicides in high violence areas can be attributed to police training alone or to police presence and higher interaction with the community.

policing in high crime areas, the authors recognize that a patrol police-training program in other countries might not yield such large effects. Importantly, the Plan was designed after a complete revamping of police patrolling protocols. Moreover, the Colombian National Police has higher levels of institutionalization and professionalism than many other corporations in the region.

- “Taking back” territory: the case of The Pacifying Police Units (UPPs) in Rio de Janeiro

In the course of six years, more than 9,000 police officers were permanently assigned to the Pacifying Police Units (UPPs), servicing close to half a million residents in the favelas (slums) whom for decades had been ruled by drug trafficking gangs and militias.

The main goals of the UPPs were: 1) to regain control of territories previously dominated by armed criminal groups; and 2) to improve security and ensure peace for residents of the favelas through reduction of shootouts and lethal violence. The UPPs marked an important departure from the militarized policing of the favelas that has terrorized citizens for decades. Since 2008, the UPPs have been introduced in over 100 favelas as a form of “proximity” policing.

In a recent impact evaluation, Magaloni et al. (2017) found that the UPP had a strong impact reducing killings by the police, but it produced mixed results on homicides. In some areas characterized by what they call monopolistic and cooperative criminal control, homicides dramatically increased with the introduction of the UPPs. In areas characterized by territorial contestation and more predatory criminal behavior, the UPPs brought decreases in homicides.

The UPPs, moreover, brought significant tensions with the community as poorly trained and deficiently controlled police officers started to engage predatory behavior vs. the population, including extortion. The population of many favelas complains that the pacification did not involve necessary expansion for social services and programs, including investments in infrastructure and schools.

Another negative externality of the UPPs is that they worked to displace criminals to other areas of the city. Although the UPPs represented, more than anything, an instrument for reducing police violence, there is evidence of a recent spike in police violence after 2015. Overall the results suggest that police interventions are unlikely to work to deter crime if they fail to gain citizen trust due to problems of police misconduct, and if police interventions are not accompanied by expansions of other forms of economic and social investment projects.

- “Pay-for-performance”

Rio de Janeiro also introduced in 2009 a pay for-performance-scheme through the Crime Reduction Performance Target Reward or *Sistema de Metas*. The government pays a salary bonus to those policemen who reduce: homicide and other violent deaths -- including homicides by the police; car theft; and street robberies. The new system of incentives offers a sharp contrast to the controversial “bravery bonus” reward policy, active from 1995 to 1998, which rewarded mostly officers who engaged in lethal shootouts with suspects.

According to evaluations by Magaloni et al (2015), the pay-for-performance system has reduced shootouts and use of ammunition by officers, as well as police killings. But in spite of the advances to reduce police violence, huge challenges remain. One of the most critical obstacles is a deep resistance among police officers to embrace the notions of a more citizen-friendly police. Several pieces of research have shown that most officers are not convinced that the UPP embodies ‘real policing’ and would rather work elsewhere (Magaloni and Cano, 2017). The Military Police of Rio de Janeiro needs to invest in better selection and training, changing cultural norms, and investing in creating better and more effective strategies for monitoring and sanctioning police misconduct.

- Prohibitionist drug policies

Prohibitionist drug policies refer to the prohibition of all use, possession, production, and trafficking of illicit drugs. These policies justify eliminating the “evil” of drugs in the name of “the health and welfare of mankind.” (Ceste et al., 2016). The “war on drugs” that grew out of the prohibitionist consensus is now being challenged on multiple fronts, including their health, human rights, and development impact.

In terms of particular strategies to disrupt drug supply, the scholarly literature has demonstrated the negative consequences of aerial spraying and its catastrophic health and welfare results for the communities and peasants that cultivated coca (Arias and Mejia, 2013; Roza 2013). According to estimates derived from a quasi-experimental evaluation of Plan Colombia, for each additional hectare sprayed with herbicides, coca cultivation is reduced by about 0.1 to 0.15 hectares (see Mejía and Restrepo, 2013).

Interdiction efforts aimed at disrupting cocaine shipments en route to consumer markets have been shown to be more effective when compared to aerial spraying campaigns (Mejía and Restrepo, 2013). Nonetheless, Castillo et al. (2013) show that one of the negative consequences of Uribe’s success in seizing drugs and disrupting the cocaine trade in Colombia was to transfer the drug violence to Mexico. Analogous spillover effects appear to have dispersed violence from Mexico and Colombia to Central America’s Northern Triangle.

Another common strategy to contain DTOs is to disrupt their organization, by arresting its top leadership. President Calderón in Mexico heavily relied on this approach with the onset of the “drug war.” Using a quasi-experimental approach, Calderón et al (2016) demonstrate that arresting or killing DTO leaders has negative externalities. These arrests, first produced strong short-term increases in executions among members of DTO members fighting for leadership positions or territory; second, these arrests provoked long-term increases in homicides affecting the general population because they contributed to breaking the chain of commands that kept criminal cells under control; and third, these arrests also produced spillover effects, dispersing violence to other areas. Overall, the “beheading strategy” increased violence by fragmenting criminal organizations. As a consequence, criminal organizations suffered a metamorphosis during the period, diversifying their portfolio of criminal activities from drug trafficking to other crimes that are more damaging to the general population, including extortion, human trafficking, sexual violence, kidnaping, and oil theft.

The overarching evidence suggest that prohibitionist drug policies have been a tremendous failure (Quah et al., 2014). The pursuit of a militarized ‘war on drugs’

strategy has produced enormous negative outcomes and collateral damage, including mass incarceration, highly repressive policies, vast corruption and colossal violence. Despite drastic increases in global enforcement spending, the supply of drugs remains unabated. Some Latin American leaders are making louder calls for ‘regulation’ as opposed to ‘prohibition’ and for treating drugs a health problem rather than a criminal one.

- Incarceration

In addition to policing approaches, it is important to consider issues regarding incarceration, which has a variety of goals, including incapacitation, punishment, deterrence and rehabilitation. The bulk of empirical research suggests that:

- Longer years in prison seem to be associated with higher recidivism.
- Serving a prison sentence versus receiving a community-based sanction is found to be associated with higher recidivism
- There is an increased likelihood that lower-risk offenders will be more negatively affected by incarceration.
- Research also warns about the collateral costs of incarceration on children of prisoners, and the longer-term costs to disadvantaged communities that can be negatively affected by the incarceration of large numbers of young adult men, thereby increasing rather than preventing crime at the neighborhood level.
- Over-crowding and the environment of incarceration seem to be associated with higher recidivism.
- Over-crowding also creates the conditions for the proliferation gangs within the prisons. In many countries, these prison gangs run the business from inside jail.

- Recidivism

In terms of recidivism, it is important to focus attention on the challenges posed by the record number prison inmates returning to the community that have limited education, poor employment skills, substance abuse problems and other deficits that are well known risk factors for a return to crime. Without treatment and assistance during the transition to community life, many offenders are likely to fail and return to prison.

Lipsey and Cullen (2007) review a set of interventions that work, both at the community level and in the correctional setting. Rehabilitation treatment is capable of reducing the re-offense rates more than correctional sanctions. The bulk of the empirical evidence suggests that:

- Resources should be spent on highland medium risk offenders.
- Rehabilitation treatments need to target criminogenic needs, including anti-social behavior, substance abuse, lack of self-control, and anti-social values and beliefs all correlated with criminal conduct.
- Cognitive behavioral treatment has proven their effectiveness in rehabilitation.
- Placing low risk-offenders with high-risk offenders may lead to an “education” in anti-social behavior for the low-risk offender.

- Community Based Corrections Facilities (CBCF), where offenders live in these facilities but work in the community and offer educational, vocational, substance abuse and employment counseling work can work.²⁹
- Intensive supervision programs (ISPs) do not seem to reduce recidivism.
- Educational and vocational training programs increase the rate of employment for ex-offenders and also reduce recidivism.
- Evaluations of various substance abuse programs have found that treatment reduces criminality as well as drug use.³⁰
- Coerced treatment ordered by courts works as well as voluntary treatment.

5. Expanding knowledge to countries with weak institutions

Crime control necessitates effective coercive measures that involve the police and the criminal justice system. No matter how punitive laws might be, if the probability of offenders being caught is low, offenders will likely engage in criminal activities. Based mostly on US evaluations, there is ample knowledge about effective policing strategies to deter crime, including the importance of assigning police to “hot spots” and “hot people”, as well the benefits of problem-oriented policing strategies that develop problem-solving skills among police officers and train them to work in collaboration with the community.

It is critical to emphasize that none of these policing strategies will work if the police are corrupted and violent and have no legitimacy among the community. Although police are a critical state institution necessary to deter crime, if not properly constrained they can become a source of oppression and human rights abuses, which further perpetuate violence (Magaloni et al., 2016).

Problems with law enforcement include corruption, excessive use of lethal force, mistreatment of suspects (including torture), extortion, and disrespect vs. members of the community. In some developing world settings, the problem goes deeper because the police might work in association or under the pay-roll of organized crime. In these cases, the police --and the state itself -- often can become a source of violence rather than a potential solution.

One of the most critical challenge to control violent crime in the developing world might very well turn out to be creating law enforcement institutions that are effective,

²⁹ A large RCT was conducted in Ohio on CBCFs. The treatment group was 3,629 offenders placed in CBCF vs. 5,855 released from prison into parole supervision. Offenders were matched on offence level and county sentencing. The experiment showed that CBCFs can be more effective for high-risk offenders. Some of the programs produce more than 20% reduction in recidivism (Latessa and Lowenkamp, “What works to reduce recidivism?”).

³⁰ Aos et al. (2006) conducted a meta-analysis of 35 rigorous evaluations of substance abuse treatment programs. They found statistically significant reductions in recidivism for prison-based programs, jail-based programs, and treatment programs delivered in the community. Similar conclusions were obtained by Cartwright (2000), Harwood et al. (2002), and McCollister et al. (2003) have all reached similar conclusions.

lawful and legitimate. Unfortunately, there is little evidence-based research on ways to improve law enforcement and policing in developing country settings.³¹

Interventions should focus on the following critical elements:

- improving selection procedures
- giving better training to police officers
- generating better strategies for monitoring, controlling and sanctioning police misconduct
- improving the police technical capacity to implement crime reduction strategies (for example, capacity to geo-locate criminal incidences, to map and predict hot spots, to register and respond to citizens calls, to analyze crime data, etc.
- improving capacity to investigate crime³²
- enhancing the legitimacy and acceptance of the police among the community.

Some earlier studies suggest that changes in the nature of supervision seem to impact police violence (Toch, Grant, and Galvin; 1975:322-327; Fye, 1978). In a recent study, Mummon (2017) credibly demonstrates that police behavior may well be manipulable by *internal* supervision.³³ However, there is little research examining the effectiveness of managerial strategies to secure officer compliance with internal procedures and department policies. Other studies cast doubt on the ability of supervision to shape police behavior, citing the difficulty of observing police activity as a powerful impediment (Goldstein 1960; Davis 1971; Wilson 1968).

Furthermore, scholars have suggested the importance of leadership, internal accountability, training, internal inspections, and willingness to challenge informal practices (Skogan and Meares, 2004). However, there is limited systematic research on any of these issues, particularly in developing world settings.

Other research suggests that it is essential to create *external* oversight mechanisms, including through the establishment of citizen councils to monitor, investigate, and sanction police misconduct. Another external control of the police is the judicial power. Civil rights and liberties groups have used the civil process to force organizational reform in the US (Skogan and Meares, 2004).

There has been substantial optimism about police body-worn cameras (BWC), which have been evaluated with various randomized control evaluations, mostly in the U.S. Cameras allow for better monitoring of police behavior by superiors, and therefore tend to reduce police violence and citizen complaints and the legal costs associated with them (Ariel et al., 2015).

³¹ For example, in Mexico less than 1 percent of crimes ever arrive to an investigation where the perpetrator is prosecuted, tried and sentenced CESIG (2016) Indice Global de Impunidad Mexico <http://www.udlap.mx/igimex/resumenejecutivo.aspx>.

³² For example, in Mexico less than 1 percent of crimes ever arrive to an investigation where the perpetrator is prosecuted, tried and sentenced CESIG (2016) Indice Global de Impunidad Mexico <http://www.udlap.mx/igimex/resumenejecutivo.aspx>.

³³ Using millions of records of police-citizen interactions, he evaluates the impact of a change to the protocol in New York City for stopping criminal suspects on police performance. An interrupted time series analysis shows that a new departmental directive aimed at restraining unjustified “Stop, Question and Frisks” (SQF) produced an immediate increase in the rate of stops producing evidence of the suspected crime. His findings underscore the strong influence of institutional factors on police behavior

Technologies such as BWC seem to provide important advantages, but they assume some basic preexisting conditions that are often missing in developing countries:

- studies have shown effects, but only provided that the cameras are used as prescribed
- protocols balancing civil liberties with the concern for police officers safety are still not fully agreed upon in the US, let alone in developing countries where BWC are quickly being adopted
- effects on the reduction of use of force are more difficult to measure than complaints because many of the studies have small numbers and are hence statistically underpowered
- very little is known about police officers attitudes and concerns regarding the use of cameras and their effect on their job satisfaction and *esprit de corps*.

Despite the optimism about body-worn-cameras, recent work in developing world settings suggests that their effectiveness might be questionable where superiors have difficulty having officers comply with their commands. In these cases, police officers might simply refuse to turn on cameras, destroy them or use them selectively (Magaloni, et al. 2017).

6. Conclusions

Much has been learned about crime prevention in the last decades. The main conclusions we derive is that crime prevention necessitates a combination of risk-focused prevention polices and coercive measures.

In terms of risk-focused prevention policies, interventions should be targeted to families, schools, communities, and at-risk youth. One of the most important empirical generalities is that adult criminals start delinquent behavior during adolescence, intensifying in the middle teen years. Early childhood family interventions can work to prevent criminal behavior later in life.

Schools are probably the most important protective factor for youth. This is because the age when criminal trajectories begin is normally during adolescence, a time in life where school is central in one's life. Schools not only generate knowledge and skills necessary for accessing future job opportunities, but attachment to school, teachers and positive peer influence may provide troubled youth with a link to conventional beliefs and values.

Moreover, cognitive behavioral interventions have proven to be effective at luring troubled youth –even those already in conflict with the law -- away from crime. Drawing from psychological theories of crime that stress lack of self-control, impulsivity and anger as causes of delinquent behavior, cognitive-behavioral interventions aim at increasing self-control and reduce youth propensity to respond to situations without thinking.

Lastly, crime is strongly associated with space and geography. Violent crime tends to be heavily concentrated in marginalized communities, where the state has very limited presence. In these areas, not only are public services, including education, electricity, paved streets, and sanitation, absent or defective, but formal conflict

resolution mechanisms are inaccessible and there is limited police presence, which means that people are left to solve their conflicts on their own.

The vacuum of the state is often filled by criminal groups, including drug traffickers, gangs, and militias. It is necessary to gain a better understanding of the mechanisms of informal social order prevailing in these settings to design effective strategies for the state to “take back” territorial control. Criminal groups often establish sophisticated “modes of governance,” wherein they regulate daily routines, resolve conflicts, and provide a form of local police that in some cases might even work better than the state police at providing social order (Magaloni et al., 2017).

Interventions to gain “territory back” will likely fail if these mostly involve sending poorly trained and monitored police officers, as was the case in Rio de Janeiro’s Pacifying Police Units (UPP), where various instances of police misconduct, corruption, and violence worked to undermine the legitimacy of the police among the community.

Moreover, these interventions will also fail if they are not accompanied by other policies. To control crime and social disorder, the state also needs to expand its reach with improved social services, health and better educational and job opportunities, particularly for the youth. As in regular counter-insurgency, “taking back territory” and control of violent crime might crucially hinge on the state’s ability to win “hearts and minds” and gain legitimacy among the community.

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