



School-Based Violence Prevention¹

School is one of the most important socializing environments for children, since it is where they spend a great deal of time interacting with teachers and peers. However, the persistent spillover of community socioeconomic conditions and violence means that schools and their surroundings are no longer protected places, but share in the day-to-day violence of the urban space (Abramovay, 2002; Gottfredson, 2001). As a result, school violence has increased correspondingly.

Although students may handle situations at school through violent behaviors, schools remain a place where they can learn not to make use of such behaviors. What can educators, policymakers, and civil society do to revert or reduce violence in schools? How can schools use their unique potential as a locus for violence prevention? This note attempts to shed light on these issues by describing approaches that have proven successful in addressing this problem.²

What is Known about School Violence?

The phenomenon of school violence encompasses all incidents in which any member of the school community is subjected to abuse, threatening, intimidating or humiliating behavior, or physical assault from a student, teacher, or staff member.³ Estimates for Latin American schools (see box 1) show that violence among students is the most common type (80 percent of cases), followed by violence on the part of students directed at teachers (15 to 20 percent), and violence on the part of parents toward teachers (2 percent) (Vanderschueren and Lunecke, 2004). One of the most recurrent and overlooked forms of violent behavior among students is bullying, which encompasses physical aggression, threats, teasing and harassment (Cornell, 1999). Between 15 and 30 percent of students in the United States are bullies or

victims. While it may be direct or indirect, verbal or physical, key aspects of bullying are that the behavior is often repeated, its effect is cumulative and it constitutes a real threat to individual and school health and safety.

Consequences of School Violence

Violence in schools has lasting effects on children and youth, the family, and the community (Morotti and Roberts Jr., 2000). At the individual level, students who are repeatedly victimized generally show a broad range of emotional and behavioral problems, including sleep disturbances, separation anxiety, hyper-vigilance, physical complaints, irritability, regression, emotional withdrawal, blunted emotions and distractibility.⁴

The build-up of emotional and behavioral problems from being victimized in school can turn into more serious behavior in the future. Research shows that students witnessing or experiencing violence while young are more likely to engage later in violent behavior.⁵ This risk increases if there are recurrent

¹ The author of this technical note is Erik Alda of the Division of Social Development, Department of Sustainable Development, IDB. He would like to thank Mayra Buvinić, Ian Mac Arthur and Loreto Biehl for their valuable comments and suggestions.

² This technical note draws on available research that is mostly from the United States. Some of the interventions described may not be entirely applicable to Latin America and the Caribbean.

³ For the purpose of this note, the general term used is violent behavior and encompasses physical, emotional, and verbal abuse, delinquency, conduct problems and disorderly behavior, and sexual and racial harassment.

⁴ <http://www.nccev.org/>

⁵ See Gottfredson, 2001; Olweus, 1979; McGee et al., 1984; Patterson, 1982; Rutter, 1982; Taub, 2002; Weiss et al., 1985; West and Farrington, 1973.

Box 1.

School Violence in the Americas

- **In Brazil**, 84 percent of 12,000 students polled in 143 schools from six state capitals consider their school violent. Almost 70 percent of the students admitted being victims of violence in the school (Abramovay, 2004).
- **In Bogotá, Colombia**, findings from a survey of more than 1,000 public school students show that almost 30 percent of males and 17 percent of females have been in at least one fight in school. Also, 20 percent of the students suffer *matoneo* (emotional violence) on a daily basis (Chaux, 2004).
- **In Managua, Nicaragua**, 6,000 students were surveyed on risks of victimization and violence in schools. Findings show that 45 percent and 37 percent of primary school students have suffered from bullying and physical aggression within their schools, respectively, compared to 50 percent and 22 percent for secondary school students (MECD, 2003).
- **In Argentina**,* findings from a nationwide survey show that 23 percent of the students bullied other students in the school several times. Ten percent of the students physically attacked other students several times. Eight percent and three percent of the students in primary school bullied or physically attacked their teachers, respectively.
- **In San Salvador**, a poll of more than 1,000 students from middle and secondary schools showed that around 15 percent of are involved in at least one school fight in any given month and almost 20 percent carry bats or sticks to school for self-defense (PNUD, 2002).
- **In Kingston, Jamaica**, almost 90 percent of the students surveyed in 11 schools are worried about school violence. Twenty-one percent of the students had attacked teachers or staff, and 22 percent had suffered violence from other students (Gardner et al., 2003).
- **In the United States**, the Indicators of School Crime and Safety show that 20 percent of all public schools suffered from at least one or more serious violent crime, such as rape, robbery, and aggravated assault during the period 1999–2000 (DeVoe et al., 2004).
- **In Canada**, 13 percent of elementary school students have been hit with an object or weapon and 23 percent have been punched, slapped or kicked by someone in the school (Ontario's Education Quality Assessment Office, 2004).

* Based on year 2000 data from Dirección Nacional de Información y Evaluación de la Calidad Educativa (DiNIECE), Argentina.

episodes of serious antisocial behavior during the early years of development (Blumstein et al., 1985; Robins, 1978; Robins and Ratcliff, 1979).⁶

Violence in the classroom may have specific cognitive and behavioral effects on children, making them less satisfied with school. This, in turn, may lead to lower performance and increased truancy (Bowen and Bowen, 1999). Grogger's (1997) research shows that in schools with moderate or serious levels of violence the likelihood of high school graduation fell by 5.1 and 5.7 percentage points respectively. Furthermore, students who feel unsafe in school and stay home run a higher risk of falling behind and dropping out of school. If violence is not dealt with effectively, it can indirectly convey a message to students that the use of violence is a viable means to solve problems.

Violence in school settings also affects the quality of teaching. Teachers working in poor communities are

often underpaid, overworked and may not have the knowledge and skills to manage episodes of violent behavior.⁷ This may lead to disillusionment in teaching in the communities where they are most needed and may encourage them to seek safer work environments.

Finally, since schools are not isolated from the broader community, there is a certain relationship

⁶ It is important to note, however, that children and adolescents are exposed to a complex interaction of multiple factors across a variety of settings (such as school, home, and community) that can consolidate engagement in violent behavior and increase the risk of subsequent involvement in crime and violence.

⁷ Estimates of the percentage of under qualified primary school teachers in Latin America countries are as follows: 46% in Bolivia, 30% in Brazil, 10% in Colombia, 14% in Costa Rica, 26% in the Dominican Republic, 17% in Ecuador, 15% in Mexico, 25% in Nicaragua, 40% in Paraguay, and 26% in Peru (Reimers, 2000).

between school violence and community well-being and social capital. Consequently, schools with high levels of violent behavior may have a negative impact on the already low levels of neighborhood cohesion and contribute to the intensification of overall crime and violence.

School Risk and Protective Factors

Violence is a complex, multifaceted, and learned behavior.⁸ Research on school violence shows that several factors increase the likelihood that students will engage in violent behavior (see table 1).⁹ Research on protective factors clearly identifies schools as providers of protection against individual, school, and community risk factors that foster violent behavior. Protective factors are assets that benefit a child's positive development. Schools can establish a strong sense of connection with students and help them achieve academic and social success by providing positive and safe learning environments, helping develop resiliency and setting high yet achievable academic and social standards. Connectedness refers not only to performing well in school, but also to a sense of belonging to the institution and what it entails for student development.

Individual Risk Factors

- *Poor academic performance.* Evidence shows that poor academic performance is associated with violent behavior in the school and later in life (Maguin and Loeber, 1996). At the same time, high levels of school violence are also related to students' poor academic performance.
- *Unstructured free time/delinquent peers.* There is a strong relationship between truancy and school drop-out at an early age and engagement in violence and other risky behaviors (Blum and Rinehart, 1997). Too much idle time after school or during school hours also increases the risk of association with delinquent peers, such as gang members, which can lead to violent behavior.
- *Age.* Younger students are more likely to be victims of violent behavior because of their normally inferior position in the balance of powers between older and younger students. During the early school years children engage in violent behaviors that involve kicking and hitting, spitting, and using pejorative nicknames for other children.¹⁰ Older students are at greatest risk of initiation to



violent crime at the ages of 15 and 16, and are most likely to commit such acts at age 17. After age 17, the risk decreases substantially, and after age 21, the likelihood of becoming a serious offender drops by 80 percent (Alcaraz, 2002).

- *Gender.* Boys are more likely to be victims and perpetrators of school violence (Schäfer and Korn, 2002; Sebastião et al., 2002). On the other hand, girls and young women are more often victims of dating violence, child abuse, sexual assault and harassment, and child exploitation, even though there has been an increase in the participation of girls as perpetrators of violence and problem behavior in schools.
- *Access to weapons.* Student access to weapons (e.g., gun, knife or club) and carrying weapons are becoming serious problems for schools since they can create an intimidating and threatening atmosphere, making teaching and learning difficult (Ingersoll and LeBoeuf, 1997), and can increase the risk of more serious, extreme violence or death. Relationships with delinquent peers and availability of weapons in the household are strong predictors of carrying weapons to school (Abramovay, 2002).

⁸ Some of the general risk factors associated with violent behavior have been discussed in detail in previous technical notes.

⁹ See Tolan and Guerra 1998; Williams et al. 1997.

¹⁰ It is important to note that the manifestation of violent behavior can differ greatly by age and grade level. It is normally more serious when the student is older.

Table 1:
School Violence Risk and Protective Factors*

	Individual	School	Community/Social
Risk Factors	<ul style="list-style-type: none"> • Poor academic performance • Unstructured free time • Delinquent peers • Age • Gender • Student constitutional factors 	<ul style="list-style-type: none"> • School size/staffing/resources • Gang activity • School governance and classroom environment • School facilities 	<ul style="list-style-type: none"> • School location • Poverty and social exclusion • Alcohol and other drugs • Witnessing and/or experiencing violence in the community • Family dynamics
Protective Factors	<ul style="list-style-type: none"> • Caring relationships • High expectations • Resilient temperament • Outgoing personality 	<ul style="list-style-type: none"> • Caring and support • High expectations • Pro-social involvement and reaffirmation 	<ul style="list-style-type: none"> • Participation in community networks

Source: Adapted from Gottfredson, 2001.

*Some of the risk and protective factors pertaining to the school category could also be part of the community/social category.

- *Student individual traits/characteristics.* Factors such as impulsiveness, difficulty conforming to rules, a low tolerance threshold, and aggressiveness are strong predictors of violent behavior in students. Educators attribute the likelihood of student aggression to a mix of several factors that include a tendency to depression, anxiety, loneliness and long-term problems such as low self-esteem.

► School-Based Risk Factors

- *School size/staffing/resources/student-teacher ratio.* Schools with a large number of students, lack of basic resources, and a high student-teacher ratio are more conducive to disorder, crime, and violence (Rossman and Morley, 1996; Watson, 1995). Furthermore, since most violence occurs in the presence of others, in schools with fewer resources it may be more difficult to control the effects on bystanders, for example, at recess and entry/exit times.
- *Gang activity.* The presence of gangs in or near schools increases the risk of students engaging in violent behavior. At the same time, gangs use their presence around schools as an opportunity to recruit new members.
- *School governance and classroom environment.* Issues related to school/classroom environments (insufficient curriculum/course relevance; student lack of interest in academics; poor student-

teacher interactions; authoritarian conduct by teachers and other staff; failure to act due to lack of recognition of potential problems; and reluctance to solve emerging problems because of fear) may foster disorderly conduct.

- *Physical infrastructure.* Physically dilapidated schools present a threat to safety and security and can contribute to episodes of crime and violence since it is easier for perpetrators to enter the school. Consequently, student behavior and performance may be affected (Fisher, 2001).

► Community/Social Risk Factors

- *School location/poverty and social exclusion.* Schools located in poorer, disorganized communities are more likely to experience more violence and disorder than schools located in more affluent, organized communities (Abramovay, 2002; Debarbieux, 1990; Gottfredson, 2001; Gottfredson and Gottfredson, 1985; McDermott, 1983). Additionally, weakened social bonds and networks within communities, ethnic composition, population density, and a high percentage of female-headed households, which are correlated with area crime and violence rates, have shown to predict higher levels of violent student behavior in schools (Gottfredson and Gottfredson, 1985).
- *Alcohol and other drugs.* The presence of alcohol and drugs in the school is strongly associated

with violent behavior. Almost 40 percent of middle and high school students in the United States cite alcohol and drugs as two of the main reasons for engaging in violent behavior.

- *Witnessing and/or experiencing violence in the community.* Students who have suffered or witnessed violence in their communities are more likely to engage in violent behavior because it is the tool they have learned to apply to resolve problems. This is especially prevalent among children who have suffered abuse and neglect in their own homes (Coie, 1990).
- *Family dynamics.* Domestic violence and child abuse/maltreatment, which result in learning and behavior problems, may be determinants of violent-prone personalities.
- Other factors such as lack of adequate parenting and role models can contribute to the likelihood of children and youth engaging in violent behavior.

► Individual Protective Factors

- *Caring relationships.* The existence of caring relationships with parents, school staff, and other adults is a major factor in developing resiliency among children and preventing violent behavior. At the individual level, caring relationships that provide children with positive behavior models create a strong sense of connectedness to family and community and promote positive values (Blum et al., 2000). Similarly, at the school level, the establishment of an orderly, flexible and responsive climate can strengthen student bonds to school and facilitate learning (Coleman, 1987; Werner and Smith, 1982).
- *High expectations.* Parents and schools that transmit high expectations to children and provide them with the necessary support to achieve these goals have higher rates of academic success (Brook et al., 1989; Edmonds, 1986; Levin, 1988; O'Neil, 1991; Rutter, 1979; Slavin et al., 1989). In addition, students develop higher self-esteem and self-efficacy, which may prevent them from engaging in violent behavior and acquainting themselves with delinquent peers.
- *Resilient temperament and outgoing personality.* Children and youth who rapidly adjust to change and easily recover from disruption and stressful situations are less likely to engage in violent behavior. At the same time, children with outgoing personalities interact easily with other chil-

dren, which may allow them to avoid violent behavior.¹¹

► School-Based Protective Factors

- *Pro-social involvement and reaffirmation.* Students that are given more opportunities to participate in the classroom and are recognized for their contributions, efforts, and progress in school, are more likely to develop strong bonds of attachment and commitment to school, family and community (Hawkins et al., 1991). On the other hand, alienation from this essential process in a student's development can result in the loss of bonds with the school and may turn into a precursor of violent behavior.
- *Student/teacher ratio.* Teachers that have fewer students in the classroom can dedicate more time to each student and focus on those students that tend to interrupt the development of the lessons and classroom. This will help reduce the risk of experiencing disorderly behavior because it will keep students engaged in school and learning and will, in turn, improve their performance.

► Community/Social Protective Factors

- *Participation in community networks.* Youth who belong to groups such as neighborhood associations or religious and school organizations that foster the development of positive informal and formal ties with other children, adults, and organizations are less likely to demonstrate aggression and/or violence (Catalano et al., 1999; Violence Prevention Institute, 2001).

School-Based Violence Prevention Approaches¹²

Schools are a key socializing institution and have proven to be an appropriate environment for effective implementation of violence prevention programs by detecting early onset and development of aggressive, antisocial behavior and averting or delaying the initial occurrence of problems. Starting preventive

¹¹ <http://www.mentalhealth.org/>

¹² School-based violence prevention can be defined as activities located in school settings directed at preventing and reducing violent behavior both inside and outside the school.

Table 2:
Types of School-Based Violence Prevention Approaches

Individual	School	Community/Social
<ul style="list-style-type: none"> • Specialized instruction • Reinforcement of positive behavior • Counseling, mentoring and social work 	<ul style="list-style-type: none"> • Establishment of norms and expectations • School, classroom and discipline management • Reorganization of grades and curriculum • Improvements to security and infrastructure 	<ul style="list-style-type: none"> • After school recreational and leisure activities involving community

Source: Adapted from various authors.

measures even as early as kindergarten may permit a situation from becoming more serious (Durlak, 1995; Gottfredson, 2001; Loeber and Hay, 1994).

Approaches to school-based violence prevention can be implemented at the individual, school, and community level, but it is difficult to classify them strictly into one category or another, since most of them include a mix of activities that address a wide range of risk factors (see table 2).

Interventions at the Level of the Individual

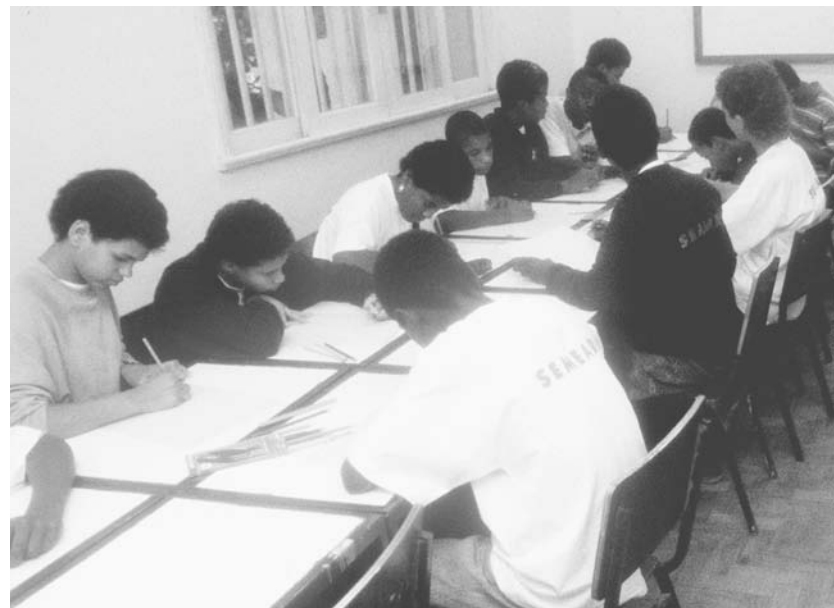
Interventions at the individual level promote the teaching of social competence and conflict resolution skills among students. These skills are usually taught through behavioral and cognitive-behavioral techniques.

Specialized instruction. These types of interventions teach students life-skills techniques that will help them increase their awareness and react appropriately to risky or harmful situations (Mihalic et al., 2004), and resist negative social influences from peers and the media.

Behavior reinforcement. This type of intervention includes cognitive-behavioral techniques that focus on at-risk students who lack social competence skills. For example, students that exhibit violent behavior may not think before they act and may not possess the necessary skills to solve problems through communication. According to research, the most effective techniques involve rehearsal and role-playing, which can be used to encourage changes in students' behavior (Gottfredson, 2001). One of the most successful and well-known programs in the

United States is a behavioral preventive approach by Bry and George (1979, 1980), which rewards promptness, class preparation and performance, attendance, and classroom etiquette. After two years, students exposed to the intervention showed higher grades and better attendance than control students, and positive effects were still found five years after the program ended.

Counseling, mentoring, and social work. These interventions are widely used with at-risk students and students that have already shown delinquent behavior. Counseling and the involvement of social workers may provide individual or group-based treatment to students with problems at home and in school. On the other hand, mentoring is most often a one-on-one intervention that involves an older person with experience who can serve as a role model. It differs from counseling in that it follows a more informal approach to address students' problems.



Interventors at the School and Classroom Level¹³

Students engage in behaviors at school that they have learned in the household and in the community. These students may use violent behavior as a problem solving strategy and disrupt the school environment. School and classroom interventions are designed to improve the overall school social climate.

Establishment of clear norms and expectations. These interventions “try to change norms in multiple environments, including the family and the communities” (Gottfredson, 1997). They are the most commonly used interventions and have been successful in reducing violent behavior and student and teacher victimization.

A successful project to reduce violent behavior and increase social competence is the *Peacebuilders Initiative*®. It becomes part of the school’s everyday routine and focuses on improving the school climate through the application of five simple principles: praise people, avoid criticism, seek advisers and friends, notice and prevent any hurtful behavior, and correct wrongdoing. Evaluation results from schools in a poor urban neighborhood of Salinas, California, which was plagued with high levels of violence, showed a 49 percent reduction in disciplinary actions; a 59 percent reduction in episodes of serious violence; a 20 percent decline in tardiness; a 31 percent decline in absences; and a 61 percent reduction in the costs associated with vandalism (Flannery et al., 2003). There are similar successful initiatives in Latin America and the Caribbean (see box 2).

School, classroom, and discipline management. Evidence shows that the way in which schools are run affects the prevalence of violence in the school setting (Gottfredson, 2001). Schools that implement measures to foster communication and collaboration between the administration and the faculty are more likely to experience less disorder and greater teacher engagement. Classroom organization and management strategies provide rewards and punishments, regrouping students in the class and using external resources, such as family and peers, to increase student engagement in learning and contribute to their academic success.

Class and Grade reorganization. Creating smaller groups of students has proven successful in reducing violent behaviors (Gottfredson, 2001). This func-

¹³ Effective school interventions involve, in most cases, parents and members of the community or neighborhood.

Box 2.

Brigadas Educativas-Colombia

*Brigadas Educativas** is an initiative created and implemented by the Colombian Red Cross. This program attempts to change behavioral norms in schools by teaching students the philosophy and values of the Red Cross, which involve impartiality, helping others, and promoting conflict resolution and peaceful coexistence. As a result of this intervention, students develop a strong loyalty to the institution and help in the process of establishing clear norms that discourage violent behavior in the schools. In addition, the intervention promotes the adequate use of free time through leisure and recreational activities. The students involved spread their knowledge and skills to the community and the household.

* There are currently 800 *Brigadas Educativas* in Colombia. Each Brigada is composed of 15 to 20 students (*Brigadistas*) that receive weekly training on human rights, first aid techniques, and coexistence values.

tions primarily by allowing greater interaction between students and teachers as a result of the smaller student/teacher ratio.

Improvements to school security and infrastructure. Schools can be made safer by banning weapons, which may require hiring security staff. The presence of police officers near schools can discourage gangs from engaging in the practice of recruiting new, young members and/or selling drugs to students. School architectural design is a fairly new approach to ensure a safe and orderly environment (Gottfredson et al., 2004). Schools in poor, violent, urban neighborhoods may benefit from infrastructure improvements, such as building higher walls and utilizing “dead spots,” or areas that are difficult to monitor.

Interventions at the Community and Social Level

Recreational and leisure activities. These interventions are designed to provide an alternative to delinquency and violent behavior. Schools provide recreational and leisure activities so students can use their idle time constructively after school or during the weekends (see box 3).

Box 3.

School-Based Leisure and Recreational Activities in Latin America*

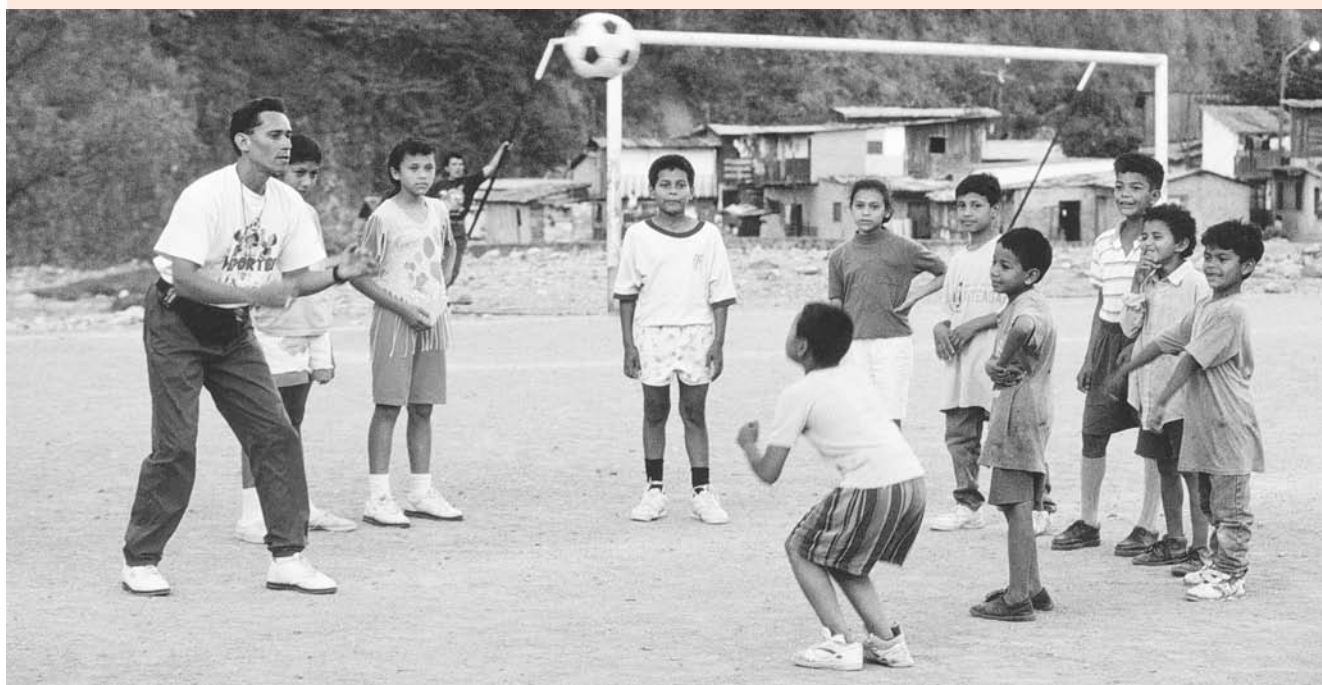
An estimated 32 percent of the population in Latin America and the Caribbean lives in poor urban communities.¹ Because of rapid, irregular, and unplanned growth, they often lack recreational areas and facilities. As a result, it is difficult to provide young people with options for supervised leisure and recreational activities, especially during the hours immediately after school, when research reveals a peak in youth violent crime (Bilchick, 1999; Snyder and Sickmund, 1999). In light of this situation, communities have begun to use schools as focal points for these types of activities (cultural, athletic, etc.), which engage young people and community members in socializing experiences that can contribute to a reduction in violent behavior (Guareschi and Jovchelovitch, 2004).

One of the most successful and comprehensive programs in Latin America that has proven effective in reducing violent behavior in schools is *Abrindo Espaços* (Opening Spaces) in Brazil, which opens the schools to the community during the weekends and promotes cultural activities and sports with the participation of school personnel. Additionally, the program includes activities directed toward improving parenting skills and peaceful coexistence in the community. *Abrindo Espaços* reaches more than 6,000 public schools and benefits more than 5,000,000 people including children, youths, and adults. Since the year 2000, it has been executed successfully in the states of Rio de Janeiro, Pernambuco, and Bahia. In addition, programs for the states of São Paulo, Rio Grande do Sul, Minas Gerais, and Piauí, are in advanced stages of design.

The positive results of the program are evident in Recife, Pernambuco, for example, where schools that have been in the program since the year 2000, present 54 percent less violent behavior than those schools that entered the program in 2002. The same trend applies to schools in the state of Rio de Janeiro, which show 31 percent less violent behavior in schools that entered in the program in 2001 compared to those that entered in 2000, among others. Furthermore, there has been an average decrease of 30 percent in violent behavior in participating schools. (Waiselfisz and Maciel, 2003).

*It is important to note that although these types of interventions have not proven particularly effective in the United States (Gottfredson, 1997; Wilson et al., 2001), there is some evidence to indicate that they have positive results in some settings in Latin America. The school and community context in which the interventions are implemented have an influence on levels of effectiveness.

¹ <http://www.unhabitat.org/mediacentre/documents/sowc/RegionalLAC.pdf>.



Program Effectiveness

A number of diverse approaches are being used in Latin America and the Caribbean to reduce violent behavior in schools; however, few of these have been the subject of rigorous evaluation, due likely to the associated complexity and cost.¹⁴ However, meta-analytic statistical techniques have been applied to data from evaluations of programs in the United States, and the results may prove useful in the design of programs in other countries. It will also be important to eventually assess whether these findings match those from evaluations of programs in Latin America and the Caribbean.

A meta-analysis of school-based violence prevention programs¹⁵ by Wilson et.al. (2001) showed that individual cognitive-behavioral and behaviorally based interventions with instructional or social competence components are generally effective. Moreover, these interventions, when targeted at high-risk youth, showed larger effects. Environmentally focused interventions at the school level through activities such as the establishment of clear norms and expectations, reorganization of classes, and classroom or instructional management also proved to be effective. Conversely, instructional interventions (such as counseling and mentoring) that did not include behavioral or cognitive-behavioral strategies did not show any significant effects in reducing violent behavior.

Violence prevention programs shown to have a lasting effect over time are comprehensive ones that

include multiple interventions, encourage positive relations between children and adults (parents, teachers, coaches, clergy members, and neighbors) as opposed to stand-alone interventions (Elias et al., 1994; Tobler, 1986; Wilson et al., 2001) and establish strong links of collaboration between the community and the school (Gottfredson, 1997; Tolan and Guerra, 1998). Some additional predictors of successful projects are explored in table 3.

Conclusions

Without a doubt, school violence is a complex and multifaceted issue. It is important to address risk factors at the individual, school, and community level that are conducive to violent behavior.

¹⁴ The Inter-American Development Bank, through nonreimbursable technical cooperation funds executed by PREAL (Partnership for Educational Revitalization in the Americas), is financing the strengthening and evaluation of six existing school-based violence prevention programs Brazil, Chile, Ecuador, and Colombia. These programs apply strategies from three main categories: (i) building school capacity for violence prevention, (ii) clarifying norms about behavior, and (iii) teaching social competency skills. PREAL will disseminate the results of the program evaluations and use them as tools to promote violence prevention mainstreaming in primary education throughout the region. For more information, please visit www.preal.cl.

¹⁵ The programs in this study were implemented in school settings and by school staff only as opposed to using external actors.

Table 3.

Predictors of High-Quality School-Based Violence Prevention Interventions

Use of the school outside regular hours. The school is the main institution outside the family that has access to the student population for long periods of time. Therefore, it is important to implement violence prevention activities in school settings as a complement to the school curriculum.

Teacher training is extensive and of high quality. Staff training for program-specific activities on violence prevention is needed. Educators do not always have the resources, responsibilities or skills to exert a positive impact on all the risks that drive children and youth to use violence. At the same time, the programs will have a larger impact if the school principal closely monitors implementation of activities.

Programs are comprehensive and highly structured. Programs need to be comprehensive and include a wide variety of interventions. Combining interventions from different successful programs tend to work better than single interventions (Flannery, 1998; Gottfredson, 2004) Moreover, in order to ensure the correct functioning of these interventions, it is of utmost importance that staff follows manuals and implementation standards and use quality control mechanisms.

(continued on next page)

Table 3.

Predictors of High-Quality School-Based Violence Prevention Interventions (continued from previous page)

Programs need to be implemented by school staff. Programs are started and implemented by school staff. However, the likelihood of having a greater impact will be higher if those who implement the program work closely with external experts and researchers to develop programs that carefully address the needs of the school and the community (Gottfredson, 2004).

Interventions involve actors from outside the school. Activities may involve multiple actors, such as parents and other members of the community. Violent behavior is first learned and experienced in the household, so parental involvement in efforts to improve parenting skills should be encouraged. At the same time, involvement by community members can play an important role in establishing a positive school climate and strong social networks that are key in shaping a young person's identity.

Schools play a critical role in violence prevention. Many school-based programs to prevent violent behavior show signs of success. Approaches mentioned above, such as those that use cognitive-behavioral or behavioral interventions as well as environmental interventions at the classroom and school level have been effective in reducing violent behavior.

Regardless of the particular school-based violence prevention intervention selected it should take account of risk and protective factors, be based on appropriate research, and be adapted to the needs of the particular school and community. Leadership from the school principal and commitment from teachers and school staff is crucial for these programs to be successful. Finally, all collaborative partners should be included in the planning and implementation of the program (Marans and Schaefer, 1998; Pollack and Sundermann, 2001; Sandhu et al., 2001).

For More Information:

National Center for Children Exposed to Violence
<http://www.nccev.org/>

National Institute of Justice
<http://www.ojp.usdoj.gov/nij/>

Center for the Study and Prevention of Violence
<http://www.colorado.edu/cspv/>

Observatorio da Violência nas Escolas, Brazil
<http://observatorio.ucb.unesco.org.br>

School-Based Violence Prevention Programs
<http://www.ucalgary.ca/resolve/violenceprevention/English/index.htm>

Series de Prevención de la violencia escolar. PREAL, Chile
<http://www.preal.cl/programasindex2ip2.php>

Unesco, Abrindo Espaços
http://www.unesco.org.br/areas/dsocial/desenvolvimentosocial/abrindoespacos/mostra_documento

References:

Abramovay, M., and Das Graças Rua, M. (2002). Violence in Schools. UNESCO, Brasília.

_____. (2004). Interview in e.ducacional.com. A internet na Educação, June 2005. <http://www.educacional.com.br/entrevistas/entrevista0111.asp>.

Alcaraz, R. (2002). School Violence. Fact Sheet. Southern California Center of Excellence on Youth Violence Prevention, University of California Riverside.

Bilchik, S. (1999). Violence After School. *Juvenile Justice Bulletin*. National Report Series. U.S. Department of Justice, Washington, D.C.

Blum, R. W., Beuhring, T., and Rinehart, P. M. (2000). Protecting teens: Beyond race, income and family structure. Minneapolis: University of Minnesota, Center for Adolescent Health.

Blum, R., and Rinehart, P. (1997). Reducing the Risk: Connections That Make a Difference in the Lives of Youth. Minneapolis: University of Minnesota, Division of General Pediatrics, Adolescent Health.

Blumstein, A., Farrington, D., and Moitra, S. (1985). Delinquency careers: Innocents, desisters and resisters. 187–219. In: *Crime and Justice: An Annual Review of Research*, Vol. 6, Edited by M. Tonry and N. Morris. Chicago: University of Chicago Press.

Bowen, N. K., and Bowen, G. L. (1999). Effects of crime and violence in neighborhoods and schools on the school performance of adolescents. *Journal of Adolescent Research*, 14, 319–342.

- Brook, J., Nomura, C., and Cohen, P. (1989). A network of influences on adolescent drug involvement: Neighborhood, school, peer, and family. *Genetic, Social, and General Psychology Monographs*, 115 (1), 303–321.
- Bry, B. H. and George, F. E. (1979). Evaluating and improving prevention programs: A strategy from drug abuse. *Evaluation and Program Planning*, 2, 127–136.
- Bry, B. H., and George, F. E. (1980). The preventive effects of early intervention on the attendance and grades of urban adolescents. *Professional Psychology*, 11, 252–260.
- Catalano, R. F., Loeber, R., and McKinney, K. C. (1999). School and community interventions to prevent serious and violent offending. *Juvenile Justice Bulletin*, 1–12.
- Chaux, E. (2004). Agresión reactiva, agresión proactiva y el ciclo de la violencia. Power Point Presentation. Centro de Investigación y Formación en Educación, Departamento de Psicología, Universidad de los Andes, Colombia.
- Coie, J. D. (1990). Toward a theory of peer rejection. In S. R. Asher, and J. D. Coie (Eds.), *Peer rejection in childhood* (pp. 365–401). New York: Cambridge University Press.
- Coleman, J. S. (1987). Families and Schools, *Education Researcher* 16 6, pp. 32–38.
- Cornell, D. G. (1999). What Works in Youth Violence Prevention. University of Virginia, Virginia Youth Violence Project.
- Debarbieux E. (1990). La violence dans la classe. Paris : ESF.
- DeVoe, J., Peter, K., Kaufman, P., Miller, A., Noonan, M., Snyder, T., Baum, K. (2004). Indicators of School Crime and Safety: 2004. NCES. U.S. Department of Education, Washington, D.C.
- Dirección Nacional de Información y Evaluación de la Calidad Educativa (DiNIECE) (2000). Operativo Nacional de Evaluación, Argentina.
- Durlak, J. A. (1995). School-based-prevention programs for children and adolescents. Thousand Oaks, CA: Sage.
- Edmonds, R. (1986). Characteristics of effective schools. In: *The School Achievement of Minority Children: New Perspectives*. Hillsdale, NJ: Lawrence Erlbaum, 93–104.
- Elias M. J., Weissberg R. P., Hawkins J. D., Perry C. L., Zins J. E., Dodge K. A., Kendall P. C., Gottfredson D. C., Rotheram-Borus M. J., Jason L. A., Wilson-Brewer R. (1994). The school-based promotion of social competence: Theory, research, practice, and policy. In R. J. Haggerty, L. Sherrod, N. Garmezy, and M. Rutter, (Eds.), *Stress, risk, and resilience in children and adolescents: Processes, mechanisms, and interventions* (pp. 269–315). New York: Cambridge University Press.
- Flannery, D. J., Vazsonyi A. T., Liau A. K., Guo S., Powell K. E., Atha H., Esterdal V., Embry, D. (2003). Initial behavior outcomes for Peacebuilders universal school-based violence prevention program. *Developmental Psychology*, 39, 292–308.
- Flannery, D. J. (1998). Improving school violence prevention programs through meaningful evaluation. ERIC Digest No. 132. New York: Teachers College, ERIC Clearinghouse on Urban Education. (ED 417 244).
- Fisher, K. (2001). Building Better Outcomes: The Impact of School Infrastructure on Student Outcomes and Behavior. Rubida Research for the Commonwealth Department of Education, Training and Youth Affairs, Australia.
- Gardner, J. M., Powell, C. A., Thomas, J. A., and Millard, D. (2003). Perceptions and experiences of violence among secondary school students in urban Jamaica. *Pan American Journal of Public Health*, vol.14, no.2, p.97–103. ISSN 1020–4989.
- Gottfredson, D. C. (2001) Schools and Delinquency. New York: Cambridge University Press.
- Gottfredson, D. C. (1997). School-based crime prevention. In: L. Sherman, D. Gottfredson, D. MacKenzie, J. Eck, P. Reuter, and S. Bushway. *Preventing crime: What works, what doesn't, what's promising: A report to the United States Congress*. Washington DC: U.S. Department of Justice, National Institute of Justice.
- Gottfredson, G. D., and Gottfredson, D. C. (1985). Victimization in schools. New York: Plenum.
- Gottfredson G. D., Gottfredson D. C., Czeh E. R., Cantor D., Crosse S. B., and Hantman Irene. (2004). Toward Safe and Orderly Schools—The National Study of Delinquency Prevention in Schools. Washington DC: U.S. Department of Justice, National Institute of Justice.
- Grogger, J. (1997) Local Violence and Educational Attainment. *Journal of Human Resources* 32(4): 659–682.
- Guareschi P. A., and Jovchelovitch S. (2004). Participation, Health and the Development of Community Resources in Southern Brazil. *Journal of Health Psychology*, March 2004, vol. 9, iss. 2, pp. 311–322(12); SAGE Publications.
- Hawkins J. D., Van Cleve E., and Catalano R. F. (1991). Reducing Early Childhood Aggression: Results of a Primary Prevention Program. *Journal of American Academy of Child Adolescent Psychiatry*, Vol 30, No 2, March, pp208–217.
- Ingersoll, S., and LeBoeuf D. (1997). Reaching Out to Youth Out of the Education Mainstream. Bulletin. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Levin, H. (1988). Accelerated schools for disadvantaged students. *Educational Leadership* 44(6), 19–21.
- Loeber, R., and Hay, D. F. (1994). Developmental approaches to aggression and conduct problems. In M. Rutter and D.F. Hay (Eds.), *Development through life: A handbook for clinicians* (pp.288–516). Boston: Blackwell Scientific.
- Marans, S., and Schaefer, M. (1998). Community policing, schools, and mental health: the challenge of collaboration. In D. Elliott, B. Hamburg, and K.R. Williams (Eds.), *Violence in American Schools* (pp. 312–347). New York, NY: Cambridge University Press.
- Maguin, E., and Loeber, R. (1996). Academic performance and delinquency. In: *Crime and Justice: A Review of Research*. 20:145–264. Ed: M. Tonry. University of Chicago Press, Chicago, IL. V.
- McDermott, J. (1983). Crime in the school and in the community: Offenders, victims, and fearful youths. *Crime and Delinquency*, 29, 270–282.

- Mihalic, S., Fagan, A., Irwin, K., Ballard, D., and Elliott, D. (2004) Blueprints for Violence Prevention. NCJ 204274. Available at www.ncjrs.org.
- Ministerio de Educación Cultura y Deporte, (MECD), (2003). Results from: Investigación sobre niñez y juventud en riesgo: victimización y violencia. Managua, Nicaragua.
- Morotti, A. A., and Roberts Jr., W. B. (2000). The bully as victim: Understanding bully behaviors to increase the effectiveness of interventions in the bully-victim dyad. *American Counseling Association*, 4, 148–156.
- Olweus, D. (1979). Stability of aggressive reaction patterns in males: A review. *Psychological Bulletin*, 86, 852–875.
- O'Neil, J. (1991). Transforming the curriculum for student risk. ASCD Update.
- Ontario's Education Quality Assessment Office (2004). Safety In Schools Survey. Ontario, Canada.
- Patterson, G. (1982). Family coercive processes: Eugene, OR: Castalia Publishing Co.
- Programa de las Naciones Unidas para el Desarrollo (2002). Indicadores sobre violencia en El Salvador. San Salvador: PNUD.
- Pollack, I., and Sundermann, C. (2001). Creating safe schools: a comprehensive approach. *Juvenile Justice*, 8 (1), 13–20.
- Reimers Arias, F. (2000). Educación, desigualdad y opciones de política en América Latina en el siglo XXI. In: www.oei.es/revista.htm.
- Robins, L. N. (1978). Sturdy childhood predictors of antisocial behaviours: Replications from longitudinal studies. *Psychological Medicine*, 32, 193–213.
- Robins, L. N., and Ratcliff, K. S. (1979). Risk factors in the continuation of antisocial behaviors into adulthood. *International Journal of Mental Health*, 7 (1), 96–116.
- Rossmann, S., and Morley, E. (1996). Education and Urban Society, 28(4), 395–411.
- Rutter, M. (1979). Protective factors in children's responses to stress and disadvantage. In: Primary Prevention of Psychopathology, Vol. 3: *Social Competence in Children*, ed. by M.W. Kent and J. E. Rolf, Hanover, NH: University Press of New England, 49–74.
- Sandhu, D. S., Arora, M., and Sandhu, V. S. (2001). School violence: risk factors, psychological correlates, prevention and intervention strategies. In D. Sandhu (Ed.), *Faces of Violence* (pp. 45-71). New York: Nova Science Publishers.
- Schäfer, M., and Korn, S. (2002). Germany: Numerous programmes – no scientific proof. In P. K. Smith (Ed.), *Violence in Schools. A European Response* (pp.100–115). London: Routledge Palmer.
- Sebastião, J., Tomás de Almeida, A., and Campos J. (2002). A report from Portugal. In: Smith, Peter (org.). *Tackling Violence in School — on European Wide Basis*.
- Slavin, R., Karweit N., and Madden N. (1989). *Effective Programs for Students At Risk*. Needham Heights, MD: Allyn and Bacon.
- Snyder, H., and Sickmund, M. (1999). *Juvenile Offenders and Victims: National Report*, p. 65. Washington, D.C., Office of Juvenile Justice and Delinquency Prevention.
- Taub, J. (2002). Evaluation of the Second Step Violence Prevention Program at a rural elementary school. *School Psychology Review*, 31(2), 186–200.
- Tobler, N. S. (1986). Meta-Analysis Of 143 Adolescent Drug Prevention Programs: Quantitative Outcome Results of Program Participants Compared To A Control Or Comparison Group. *The Journal of Drug Issues*, 16(4), 537–567.
- Tolan, P., and Guerra, N. G. (1998). What works in reducing adolescent violence: An empirical review of the field. Boulder, CO: Institute of Behavioral Science, Regents of the University of Colorado.
- Vandesrhuere F., and Y Lunecke, A.(2004). Prevención de la delincuencia Juvenil. Análisis de Experiencias Internacionales. Serie Libros, División de Seguridad Ciudadana, Ministerio del Interior, Chile.
- Violence Prevention Institute (2001). What Factors Foster Resiliency Against Violence?. School Violence prevention fact sheets No 5. Oakland, CA.
- Waiselfisz, J., and Maciel M. (2003). Revertendo violencias, semeando futuros: Avaliação de Impacto do Programa Abrindo Espaços no Rio de Janeiro e em Pernambuco. UNESCO, Brasília.
- Watson, R. (1995). A guide to violence prevention. *Educational Leadership*, 55(2), 57–59.
- Werner, E., and Smith, R. S. (1982). *Vulnerable but invincible: A longitudinal study of resilient children and youth*. New York: McGraw-Hill.
- West, D., and Farrington, D. (1973). *Who becomes delinquent?* London: Heinemann Educational.
- Williams, K. R., Guerra, N. G., and Elliott, D. S. (1997). *Human development and violence prevention: a focus on youth*. Boulder, CO: Institute of Behavioral Science, Regents of the University of Colorado.
- Wilson, D. B., Gottfredson, D. C., and Najaka, S. S. (2001). School-Based Prevention of Problem Behaviors: A Meta-Analysis. *Journal of Quantitative Criminology*, 17(3), 247–272.