

Preventing Youth Violence: School-based Programs Work!

CRIME PREVENTION RESEARCH DIGEST

ISSUE 1

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Identifying a Need

Growing up has never been easy. In their formative years, children learn to cross the street, share their toys, and recite the alphabet. As they mature, they learn social skills and how to navigate and negotiate relationships. And, unfortunately, for many children, growing up includes involvement in violent crime, whether as victims or as perpetrators.

In fact, according to federal crime statistics,¹ between 1993 and 2003, juveniles ages 12 to 17 were about two and one-half times more likely than adults to be the victim of a nonfatal violent crime.² (The

National Crime Victimization Survey, administered by the Bureau of Justice Statistics, does not interview children under age 12.)

Many of these crimes occurred in or at school: 53 percent of the violent crimes against youth ages 12 to 14 and 32 percent of violent crimes against youth ages 15 to 17 occurred in a school setting.³ In 2005, secondary students (ages 12 to 18) reported 628,200 violent crimes at school.⁴

The good news: Rates of violent crime victimization declined dramatically—by 55 percent—for juveniles between 1993 and 2003,⁵ and

¹ U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, *Juvenile Offenders and Victims: 2006 National Report*. (Washington: 2006) 27–28.

² Violent crimes include rape, sexual assault, robbery, aggravated assault, and simple assault.

³ *Supra*, note 1 at p. 28.

⁴ National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice, *Indicators of School Crime and Safety: 2007*. (Washington: 2007) .

⁵ *Supra*, note 1, at p. 28.



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that trend continued into 2004–2005.⁶

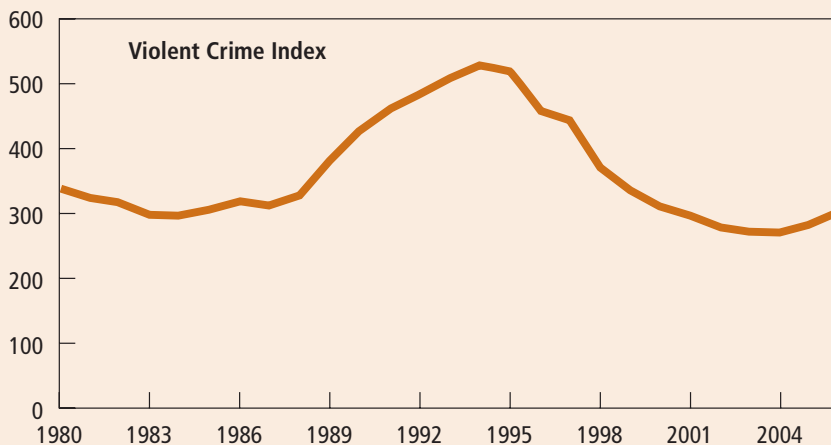
The bad news: After reaching its lowest level since at least 1980, the juvenile arrest rate for violent crimes increased 12 percent between 2004 and 2006.⁷ In 2006, youths under the age of 15 accounted for 4.8 percent of all arrests for violent crimes; youths under the age of 18 accounted for 16.5 percent.⁸

“...[T]here is strong evidence that universal, school-based programs decrease rates of violence among school-aged children and youth.”

For many years, innovative educators, child development specialists, and crime prevention experts have experimented with different strategies to keep children safe from crime. This issue of *Crime Prevention Research Digest* focuses on violence prevention programs that are offered to children in schools.

School-based violence prevention programs are found at all grade levels, in public and private schools, across the country. Some programs are solely curriculum-driven; others incorporate elements of individual or group counseling; still others include parents and other community members in a comprehensive

Arrests per 100,000 juveniles ages 10–17, 1980–2006



environmental approach. Some programs target children deemed to be “at risk”; others, known as “universal” programs, are offered for all children in the participating school, grade, or classroom.

Many of these programs were designed and evaluated by researchers. Literally hundreds of studies of school-based violence prevention programs have been published in a wide range of professional and academic venues.

How does one make sense of all this? The good news is that two significant efforts were recently undertaken to do just that. And better yet—although they used very different methodologies—these two initiatives agree: School-based violence prevention programs work!

This issue of the *Crime Prevention Research Digest* summarizes

the two independent expert evaluations of school-based violence prevention programs, describes core features of three widely recognized programs, and suggests implications for those who are considering implementing a violence prevention program in a school setting.

A Little History

In 2007, a special supplement to the *American Journal of Preventive Medicine* (Vol. 33) focused on the burgeoning interest in school-based violence prevention and the results of the two independent evaluative efforts that are described in this issue of *Crime Prevention Research Digest*.

In his prefatory comments, William Modzeleski, associate assistant deputy secretary with the Office

⁶ U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics Bulletin, *Criminal Victimization, 2005*. (Washington: 2006).

⁷ OJJDP Statistical Briefing Book. December 13, 2007, April 22, 2008 http://ojjdp.ncjrs.org/ojstatbb/crime/JAR_Display.asp?ID=qa05201.

⁸ Federal Bureau of Investigation, *Crime in the United States, 2006*, Table 41.

of Safe and Drug Free Schools, U.S. Department of Education, identified three events that converged to intensify interest in implementing effective violence prevention programs in schools across the country⁹:

1. The shootings at Columbine High School in 1999, which underscored the fact that violence is not solely an inner-city phenomenon. It happens in affluent suburbs, too.
2. The *No Child Left Behind Act of 2001*, which emphasized the use of science-based programs, not only for academic programs but for alcohol, drug, and violence prevention programs as well.
3. The “Ineffective” rating assigned to the Department of Education’s State Grants Program by the Office of Management and Budget, which prompted the department to take steps to improve the quality of programming in the face of threatened funding cuts.

In fact, the term “evidence-based” has become the mantra for all manner of policy and practice. And with good reason: When resources are tight, decision makers need to know that policies, programs, and practices—whether they are already in place or proposed for future implementation—actually achieve their intended purposes.

Two Evaluations Agree: What They Did and What They Found

By the Numbers

In their approach to evaluating the plethora of documented school-based violence prevention programs, researchers Sandra Jo Wilson and Mark W. Lipsey used a statistical technique called a meta-analysis, in which the results of multiple studies are combined and analyzed as if they were produced by a single large study.

Wilson and Lipsey combed through published and unpublished studies, searching for programs and evaluations that met certain criteria:

- The study was reported in English.
- The study was published no earlier than 1950.
- The violence prevention program focused on children ranging in age from pre-kindergarten through 12th grade.
- The study measured the effects of the program on either aggressive/violent behavior (e.g., fighting, bullying, or person crimes) and/or disruptive behavior (e.g., classroom disruption, conduct disorder, acting out).
- The study met certain methodological requirements.

Ultimately, the researchers found 249 studies that qualified for their

analysis. They classified the violence prevention programs as follows:

1. Universal programs, given to all students in the classroom setting
2. “Selected/indicated” programs, provided to students with behavior or conduct problems
3. Special schools or classes, e.g., alternative schools or classes for children who cannot be taught in mainstream classrooms
4. Comprehensive/“multimodal” programs, often including components for parents

Some researchers project that school-based violence prevention programs could reduce aggressive or disruptive behaviors by as much as 25 to 33 percent.

The programs utilized multiple teaching strategies, most commonly social problem-solving and social skills training but also anger management, behavioral treatment, counseling, and academic services. Nearly half of the programs relied on teacher reports to measure student outcomes;

⁹ William Modzeleski (2007), “School-Based Violence Prevention Programs: Offering Hope for School Districts,” *American Journal of Preventive Medicine*, Vol. 33 (2S), S107–S108.

self-reports, records/archives, observations, and parent/peer reports were less frequently used.

What the meta-analysis found

Hundreds of school-based programs are working effectively to reduce aggressive and disruptive behaviors in the school setting, especially among students from economically disadvantaged backgrounds and students who had already exhibited problematic behaviors.

Another Way to Look at It

Using an alternative approach, an independent, nonfederal Task Force on Community Preventive Services, with staff support from the Centers for Disease Control and Prevention, undertook a “systematic review” of universal school-based violence prevention programs, i.e., programs that are delivered to all students in a given school or classroom regardless of the students’ individual levels of risk.

Task force members represented universities, research organizations with expertise in health promotion and injury prevention, the U.S. Department of Health and Human Services, and the U.S. Department of Justice.

Much like the meta-analysis described above, the systematic review process began with a search for programs and studies that met certain

criteria. Like the meta-analysis, programs were included if they focused on any grade level (pre-K through 12th grade) and had as an objective the reduction of violent or aggressive behavior. Unlike the meta-analysis, the systematic review considered only universal programs and included programs operating outside the United States. Outcome measures of interest were the same for both approaches—primarily measures of aggression or violence, although other behavioral indicators were available as well.

Ultimately, the task force identified and reviewed 53 studies, only 27 of which overlapped with the studies of universal programs that were included in the meta-analysis. About three-quarters of these studies used direct measures of aggression or violence; the remaining studies relied on proxy measures, such as conduct disorders, externalizing behaviors, acting out or conduct problems, delinquency, and school suspensions or disciplinary referrals.

In addition to determining whether the programs worked to reduce aggression or violence, the experts calculated “effect sizes” across the 53 studies to determine how well the programs worked.¹⁰

What the reviewers found

Universal school-based programs reduced violence—across all grade

levels, in all types of school environments, and among all ethnic groups. The type of teaching strategy didn’t matter, nor did the length of the program or how frequently it was delivered.

Specifically, the systematic review concluded that, on average, these programs reduced violence for participating students by the following amounts:

- For different grade levels
 - Preschool—32 percent
 - Elementary—18 percent
 - Middle school—7 percent
 - High school—29 percent
 - All grades combined—15 percent
- For different community environments (where stated in the study)
 - Neither low socio-economic status (SES) nor high crime—21 percent
 - High crime/low SES—29 percent
- For different ethnic majorities (where stated in the study)
 - Black—17 percent
 - White—20 percent
 - Hispanic—0.5 percent
 - No clear majority—10 percent

Effect size tended to decrease over time since the students’ exposure to the programs.

¹⁰ “Effect size” is a standardized measure of the relative size of the effect of an intervention. This statistic is frequently used in meta-analyses to compare effects across multiple studies.

SOURCES

Hahn, R., Fuqua-Whitley, D., Wethington, H., et al. (2007). Effectiveness of Universal School-Based Programs to Prevent Violent and Aggressive Behavior: A Systematic Review. *American Journal of Preventive Medicine*, Vol. 33 (2S), S114-S129.

Wilson, S.J., and Lipsey, M.W. (2007). School-Based Interventions for Aggressive and Disruptive Behavior: Update of a Meta-Analysis. *American Journal of Preventive Medicine*, Vol. 33 (2S), S130-143.

Both articles and commentary can be found online at www.thecommunityguide.org.

What This Means for Practice: Examples of Three Effective Programs

As these studies revealed, there are literally hundreds of school-based programs working to reduce violence and aggression. Now that we know this, so what?

Again, there's good news. Researchers with the Center for the Study and Prevention of Violence (CSPV) at the University of Colorado-Boulder assembled the results of 12 reviews by panels of experts in criminal justice, public health, education, and related disciplines that independently examined and rated 299 programs. (Many of the programs focused on substance abuse, treatment interventions, or other

approaches that were not specific to violence prevention.) Below we provide thumbnail sketches of three school-based violence prevention programs that were reviewed and found effective by three or more of these panels.¹¹ Although many programs were also found effective, these were selected for this summary because they represent different approaches: two are curriculum-driven while the third focuses on changing the school climate; two focus on pre-school and elementary school children and one extends to secondary school students. Readers are encouraged to consult the CSPV website for the matrix of all programs that were reviewed.¹²

PATHS (Promoting Alternative Thinking Strategies)

The PATHS curriculum is a universal research-based violence prevention program for grades K-6 that was developed more than 10 years ago. Designed to be taught by a classroom teacher, the PATHS curriculum consists of three major units: Self-Control (12 lessons), Feelings and Relationships (56 lessons, including a sub-unit on anger management), and Interpersonal Cognitive Problem-Solving (33 lessons). The curriculum is

intended to be offered three times a week for at least 20 minutes.

PATHS has been evaluated, using randomized controlled studies, with children in traditional classrooms, with special education children, and with deaf/hearing-impaired children. These studies found that one year after completing the PATHS curriculum:

- Special needs children displayed fewer aggressive and disruptive behaviors, according to teacher reports
- Students themselves reported fewer conduct problems

Among the 12 panels that rated violence prevention programs, one designated PATHS a "model" program, two named it "exemplary," four considered it "effective," and two called it "promising." Three panels did not review the PATHS curriculum.

For more information, visit the website of the Prevention Research Center at Pennsylvania State University: www.prevention.psu.edu/projects/PATHS.html.

PeaceBuilders

PeaceBuilders uses a very different approach to school-based violence prevention. Geared to children in kindergarten through grade 5,

¹¹ The National Crime Prevention Council and the Bureau of Justice Assistance do not endorse these or any other school-based violence prevention programs.

¹² The program matrix, current as of March 2007, can be found at <http://www.colorado.edu/cspv/blueprints/matrix/matrix.pdf>.

PeaceBuilders is not curriculum-driven. Instead, it attempts to reduce aggressive behavior and increase social competence by changing the school culture or climate.

Participating schools infuse a set of five behavioral principles for students and staff: (1) praise people, (2) avoid put-downs, (3) seek wise people as advisers and friends, (4) notice and correct hurts we cause, and (5) right wrongs. These rules are incorporated throughout normal school-day activities in various ways, e.g., through “praise notes” and principal “preferrals,” in which students are sent to the principal’s office, not for disciplinary measures, but as a reward for good deeds.

The PeaceBuilders program was evaluated over a two-year period in eight elementary schools involving more than 4,000 children. Children’s levels of aggressiveness, prosocial behaviors, and social competence were rated using both teacher reports and self-reports before and after their exposure to PeaceBuilders. According to teacher ratings, and compared with their counterparts in non-PeaceBuilders schools, students in PeaceBuilders schools scored

- Significantly higher on social competence (grades K–2)

- Significantly lower on aggressiveness (grades 3–5)¹³

Children classified as “high-risk” based on teachers’ baseline assessments of aggression and social competence showed the most significant improvements in terms of decreased aggression and increased social competence.¹⁴

Of the four panels that reviewed this program, PeaceBuilders was designated “exemplary” by one, “effective” by another, “promising” by a third, and “favorable” by a fourth.

For more information about PeaceBuilders, visit www.PeaceBuilders.com.

Strengthening Families Program

The Strengthening Families Program (SFP) is a long-standing curriculum designed for high-risk children ages 6 to 17 and their parents, with separate versions for elementary school, middle/junior high school, and high school. The program seeks to improve family relationships, parenting skills, and increase the youths’ social and life skills. The goal is to increase resilience and reduce risk factors for behavioral, emotional, academic, and social problems.

The curriculum includes courses in parent skills, children’s skills, and family life skills, conducted over 14 two-hour sessions. Training for children and parents is offered both separately and together as families. Although the program was originally designed for children of substance-abusing parents, it has been effectively used with non-substance abusing parents in a wide variety of settings and from several demographic populations.

Several versions of the Strengthening Families Program have been evaluated since the program’s inception in 1983. For example, one study assigned 22 public schools to experimental conditions, which received the SFP curriculum, or control conditions, which did not receive the curriculum. Students in the participating schools were tested in 6th grade before the curriculum was implemented and then post-curriculum during 6th, 7th, 8th, and 10th grades. Researchers collected ratings of aggressive-hostile behaviors in interactions with parents from independent observers and from family members. They also collected self-reports of the students’ aggressive-destructive behavior across settings.

The researchers reported that all measures showed generally positive

¹³ Flannery, D.J., Vazsonyi, A.T., Liao, A.K., Guo, S., Powell, K.E., Atha, H.A., et al. (2003), “Initial behavior outcomes for PeaceBuilders universal school-based violence prevention program,” *Developmental Psychology*, Vol. 39, 292–308.

¹⁴ Vazsonyi, A.T., Belliston, L.M., and Flannery, D.J. (2004), “Evaluation of a School-Based, Universal Violence Prevention Program: Low-, Medium-, and High-Risk Children,” *Youth Violence and Juvenile Justice*, Vol. 2, 185–206.

trends over the four-year study period. Notably, during 10th grade, students who received the curriculum self-reported significantly less aggressive-destructive conduct. Researchers also found significantly fewer aggressive-hostile behaviors in the students' interactions with their parents, according to independent observers.

The researchers conclude that the SFP program has potential to reduce youths' aggressive and hostile behaviors toward their parents and outside the home.¹⁵

The Strengthening Families Program was named “exemplary” by three of the review panels, “effective” by two panels, and “promising” by three panels. Four panels did not rate this program.

For more information about this program, visit www.strengtheningfamiliesprogram.org.

Caveats to Remember

It is encouraging to know that school-based violence prevention programs can make a difference in children's behavior. However, in her commentary on the findings of the meta-analysis and the systematic review, researcher Denise Gottfredson offers a few important reminders to teachers and other

violence prevention practitioners who may be considering implementing a program in their schools.¹⁶

Quality of implementation matters. You may not see the same results if you don't follow the program as designed. Program fidelity is key to a successful replication.

The effects of these programs may be short-lived. Most of the evaluations were based on student behaviors at the time the program ended or up to six months later.

Most of the programs did not measure violent behaviors outside the school setting. Knowledge about school-based violence prevention programs will continue to evolve. This *Crime Prevention Research Digest* offers some direction to educators and other professionals who seek to introduce effective, evidence-based interventions to keep children safe in their schools and in their communities.

RESOURCES

www.thecommunityguide.org. This website, sponsored by the Centers for Disease Control, offers evidence-based recommendations for programs and policies to promote population health. Violence is only one of several topics available. The Community Guide is sponsored by the CDC's National Center for

Health Marketing and the Community Guide Partners.

www.promoteprevent.org. The National Center for Mental Health Promotion and Youth Violence Prevention provides technical assistance and training to school districts and communities that receive grants from the Substance Abuse and Mental Health Services Administration (SAMHSA) of the U.S. Department of Health and Human Services.

www.colorado.edu/cspv/blueprints. A project of the Center for the Study and Prevention of Violence at the University of Colorado, Blueprints identifies model programs and provides training and technical assistance to help sites choose and implement a set of demonstrated effective programs with a high degree of integrity.

www.preventschoolviolence.org. The Consortium to Prevent School Violence is a nonprofit group of researchers, practitioners, and other stakeholders who are focused on advocacy that promotes effective implementation of positive school violence prevention practices, and fostering technical assistance, information dissemination, and professional development based on high-quality scientific research.

www.ed.gov/about/offices/list/osdfs/index.html. The mission of the Office of Safe and Drug-Free Schools, within the U.S. Department of Education, is creating safe schools, responding to crises, drug abuse, and violence prevention, ensuring the health and well-being of students and promoting development of good character and citizenship.

¹⁵ Spoth, R., Redmond, C., and Shin, C. (2000), “Reducing adolescents' aggressive and hostile behaviors: Randomized trial effects of a brief family intervention four years past baseline,” *Archives of Pediatrics and Adolescent Medicine*, Vol. 154, 1248–1257.

¹⁶ Gottfredson, Denise C. (2007), “Some thoughts about research on youth violence prevention,” *American Journal of Preventive Medicine*, Vol. 33 (2S), S104–S106.



The National Crime Prevention Council (NCPC) is a private, nonprofit tax-exempt 501(c)(3) organization whose primary mission is to be the nation's leader in helping people keep themselves, their families, and their communities safe from crime. NCPC's strategic plan for 2007 through 2011 is centered on four goals: protect children and youth; partner with government and law enforcement to prevent crime; promote crime prevention and personal safety basics; and respond to emerging crime trends. NCPC publishes books, kits of camera-ready program materials, posters, and informational and policy reports on a variety of crime prevention and community-building subjects. NCPC offers training, technical assistance, and a national focus for crime prevention: it acts as secretariat for the Crime Prevention Coalition of America, more than 400 national, federal, state, and local organizations representing thousands of constituents who are committed to preventing crime. NCPC sponsors the National Crime Prevention Association, an individual membership association to promote resources and career development to crime prevention practitioners. It hosts two websites: www.ncpc.org for adults and www.mcgruff.org for children. It operates demonstration programs in schools, neighborhoods, and entire jurisdictions and takes a major leadership role in youth crime prevention and youth service. NCPC manages the McGruff® "Take A Bite Out Of Crime®" public service advertising campaign. NCPC is funded through a variety of government agencies, corporate and private foundations, and donations from private individuals.



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National Crime Prevention Council

2345 Crystal Drive, Suite 500

Arlington, VA 22202

202-466-6272

www.ncpc.org