



NATIONAL  
INSTITUTE  
OF JUSTICE

Crime  
SOLUTIONS

[Home](#)

# Practice Profile: Selective School-Based Violence Prevention Programs

## Evidence Ratings for Outcomes

 Juvenile Problem & At-Risk Behaviors - Aggression

**Date:** This profile was posted on November 13, 2020

### Program Summary

This practice consists of programs designed to prevent or reduce aggressive or violent behavior in K–12 students who are considered at risk of or who have demonstrated such antisocial behaviors. The practice is rated Effective for reducing aggression in students who participated in school-based violence prevention programs, compared with students who did not participate.

### Program Description

#### Practice Goals/Target Population

Research has shown that youth violence and related aggressive behaviors, such as bullying or antisocial behavior, can be risk factors for later adult violence (Mytton et al. 2006). According to the 2017 Youth Risk Behavior Survey, nearly a quarter of U.S. high school students reported getting into a physical fight in the previous year (Centers for Disease Control and Prevention, 2020). Selective school-based violence prevention programs (also known as secondary violence prevention programs) target specific

Top

students in grades K–12, compared with universal violence prevention programs, which are implemented with all students in a school or classroom. The overall goal of these programs is to prevent or reduce violence and aggression schoolchildren.

## Services Provided

Selective school-based violence prevention programs vary in their components, approaches, and scope. Specific components may include anger control training, anger management, stress inoculation, individual counseling, mentoring, parent training, life skills, peer-group conflict management, coping skills training, cognitive skills training, empathy training, problem-solving skills training, and conflict management training (Mytton et al. 2002).

Programs can be implemented based on theoretical approaches, rooted in established psychological theories of behavior (Park-Higgerson et al. 2008). For example, some programs are based on attribution theory, which proposes that aggressive and hostile behavior stems from outward motivators (e.g., negative actions of others that are perceived as intentional). These programs seek to reduce aggressive behavior by teaching youth how to control and manage anger when these motivators occur (Herrmann and McWhirter 2003). Other programs are built on social cognitive theory, which suggests that learning occurs through a social context by observing outside interactions and experience. Following on to this theory, these programs often involve elements of role play and modeling (Park-Higgerson et al. 2008).

The scope of the intervention may also vary from program to program. For instance, single-approach programs focus solely on implementing a curriculum in the classroom, whereas multiple-approach programs involve other aspects of the students' lives and can include parents, peers, and members of the community in violence prevention efforts.

School-based interventions are often led by the child's classroom teacher, but specialists can also come into the classroom to lead the program while the teacher assists.

Top

## Meta-Analysis Outcomes



### Juvenile Problem & At-Risk Behaviors - Aggression

Across seven randomized controlled trials, Mytton and colleagues (2006) found a statistically significant effect size of 0.4 for aggression at the 12-month follow up. This finding indicates that students who participated in selective violence prevention programs displayed less aggression, compared with students who did not participate in the programs. Conversely, looking at the results from 19 randomized controlled trials, Park-Higgerson and colleagues (2008) did not find any statistically significant impacts on measures of aggression and violence between students who participated in selective violence prevention programs, compared with students who did not participate.

## Meta-Analysis Methodology

Meta-Analysis Snapshot			
	Literature Coverage Dates	Number of Studies	Number of Study Participants
<b>Meta-Analysis 1</b>	1977 - 2002	51	7118
<b>Meta-Analysis 2</b>	1977 - 2004	26	11775

### Meta-Analysis 1

Mytton and colleagues (2006) conducted a meta-analysis to examine the efficacy of secondary school-based violence prevention programs (which are targeted specifically at children previously identified as being aggressive or at risk of being aggressive). A comprehensive search was conducted through multiple electronic databases, including Cochrane Central Register of Controlled Trials; MEDLINE; EMBASE; PsycLIT; PsycINFO; ERIC; Dissertation Abstracts; Social Sciences Index; the National Criminal Justice Reference Service; and the Social, Psychological, Education and Criminal Trials Register of the Campbell Collaboration. Studies were determined eligible for inclusion if 1) participants were randomly assigned to intervention and control groups; 2) outcome data were collected concurrently; 3) participants consisted of children in mandatory

Top

education (i.e., students in K–12) identified as exhibiting, or who were at risk of exhibiting, aggressive behavior; 4) interventions were designed to reduce aggression, violence, bullying, conflict, or anger; 5) the interventions were school-based; and 6) outcomes included aggressive behavior, school and agency responses to acts of aggression, or violent injuries.

A total of 56 randomized controlled trials (RCTs) were identified for inclusion. Of the 56 RCTs, 51 compared an intervention group with a control or placebo group, and the remaining 5 compared two different interventions (these 5 trials were not included in the meta-analysis). The meta-analysis did not provide specific information on age, race/ethnicity, or gender of the study participants.

Outcomes of interest included aggressive behavior (which could be measured by standardized tests, such as the Child Behavior Checklist, or actual counts of aggressive behaviors, such as fighting or bullying); school responses to aggression (such as detentions, suspensions, or other school or agency actions); and violent injuries (such as casualty attendances for assault, or an injury that required an emergency room visit). All 51 RCTs included in the overall meta-analysis reported measures of aggressive or violent behavior. None of the identified studies reported information on violent injuries, 34 studies reported on aggressive behavior measured either by an aggression scale score or by observed aggression, and 9 studies reported data on school or agency responses to aggressive acts (the meta-analysis did not provide specific information on the measures available in the remaining 8 studies). Outcomes were compared immediately postintervention (34 studies) and at a 12-month follow up (7 studies). The CrimeSolutions review of this meta-analysis focused on the 7 RCTs that reported the difference in aggression scale scores or observed aggression by type of school (primary and secondary schools combined) at the 12-month follow up.

The standardized mean difference was calculated to express the size of the intervention effect. The study authors conducted subgroup analyses to examine the difference in aggression scale scores between younger and older youth.

## Meta-Analysis 2

Top

Park-Higginson and colleagues (2008) conducted a meta-analysis to examine the efficacy of different types of school-based violence prevention programs. A comprehensive search of multiple electronic databases was conducted, including PubMed; MEDLINE; PsycINFO; Criminal Justice Info; National Institute of Justice; Education Resource Information Centre; and the National Criminal Justice Reference Service. Key terms searched for included “adolescent”, “violent”, “aggressive”, “externalizing”, “school”, “prevention”, and “intervention”. Studies were determined to be eligible if 1) the program was designed to prevent aggression or violence in children or adolescents; 2) the study population included students enrolled in first through 11th grades; 3) the study randomly assigned participants to either an intervention or control group; 4) the outcomes of interest were defined as externalizing, aggressive, or violent behavior; 5) the type of intervention was designed to reduce aggressive or violent behavior through improving social skills, providing education, or changing the environment; 6) the program was school-based; and 7) the study published the necessary statistical information to determine the direction of the effect.

A total of 26 studies were identified as eligible for analysis, which included roughly 11,775 study participants. Of the programs studied, 16 were theory-based, and 10 were not theory-based. There were 17 single-approach programs included, and 9 programs were multiple-approach. Younger students (third grade or younger) were targeted in 9 programs, and older students were targeted in 14 (the other 3 studies did not specify a targeted age group). Of the 26 total programs included, 17 were led by specialists, and 5 were led by schoolteachers (the other 4 studies did not specify who the programs were led by). With regard to type of program, 19 were considered selective prevention programs (i.e., provided only to students who were previously identified as aggressive or violent), and 7 were considered universal prevention programs (i.e., provided to all students). The CrimeSolutions review of this meta-analysis focused on the outcomes related to the selective prevention programs. The standardized mean difference was calculated to express the size of the intervention effect.

## Cost

There is no cost information available for this practice.

Top

## Other Information

Mytton and colleagues (2006) conducted subgroup analyses to examine the effect of selective violent prevention programs on younger children (11 years and younger), compared with older youth (12 years and older). They found that there were no statistically significant differences between younger and older children on measures of aggression scale scores, which suggests that the effectiveness of the programs does not differ by age.

## Evidence-Base (Meta-Analyses Reviewed)

These sources were used in the development of the program profile:

### Meta-Analysis 1

Mytton, Julie A., Carolyn DiGuseppi, David Gough, Rod S. Taylor, and Stuart Logan. 2006. "School-Based Secondary Prevention Programmes for Preventing Violence." *Cochrane Database of Systematic Reviews* 3:1–72.

### Meta-Analysis 2

Park-Higgerson, Hyoun-Kyoung, Suzanne E. Perumean-Chaney, Alfred A. Bartolucci, Diane M. Grimley, and Karan P. Singh. 2008. "The Evaluation of School-Based Violence Prevention Programs: A Meta-Analysis." *The Journal of School Health* 78(9):465–79.

## Additional References

These sources were used in the development of the program profile:

Centers for Disease Control and Prevention. 2020. "High School Youth Risk Behavior Survey: United States 2017 Results."

[https://nccd.cdc.gov/Youthonline/App/Results.aspx?](https://nccd.cdc.gov/Youthonline/App/Results.aspx?TT=C&OUT=0&SID=HS&QID=H17&LID=XX&YID=2017&LID2=&YID2=&COL=S&ROW1=N&ROW2=N)

[TT=C&OUT=0&SID=HS&QID=H17&LID=XX&YID=2017&LID2=&YID2=&COL=S&ROW1=N&ROW2=N](https://nccd.cdc.gov/Youthonline/App/Results.aspx?TT=C&OUT=0&SID=HS&QID=H17&LID=XX&YID=2017&LID2=&YID2=&COL=S&ROW1=N&ROW2=N)

Top

Herrmann, D. Scott, and J. Jeffries McWhirter. 2003. "Anger and Aggression Management in Young Adolescents: An Experimental Validation of the SCARE Program." *Education and Treatment of Children* 26(3):273–302.

Mytton, Julie A., Carolyn DiGuseppi, David A. Gough, Rod S. Taylor, and Stuart Logan. 2002. "School-Based Violence Prevention Programs: Systematic Review of Secondary Prevention Trials." *Archives of Pediatric and Adolescent Medicine* 156:752–62.

## Related Programs

### Practice Snapshot

**Age:** 4 - 18

**Gender:** Male, Female

**Setting (Delivery):** School

**Practice Type:** Classroom Curricula, School/Classroom Environment, Violence Prevention

**Unit of Analysis:** Persons

**Date Created:** December 4, 2020



U.S. DEPARTMENT OF JUSTICE  
OFFICE OF JUSTICE PROGRAMS

Top