NREPP SAMHSA's National Registry of Evidence-based Programs and Practices

Evidence Summary

School-Based Violence Prevention Programs

What is School-Based Violence?

Violence prevention in schools has been a hot topic among policymakers, program developers, school administrators, and numerous other stakeholders in recent decades, in part due to the media coverage on shootings at Columbine High School and Sandy Hook Elementary School. While these large-scale tragedies have captured national attention, less visible incidents of violence plague our school systems. To better understand the goals and importance of prevention programs in schools, it is necessary to understand what is meant by "school based violence." Who are the individuals involved? How often does it occur? What outcomes result from these behaviors?

There are various definitions of school violence (Lassiter, 2009), such as "a range of activities, including assaults with or without weapons, physical fights, threats or destructive acts other than physical fights, bullying, hostile or threatening remarks between groups of students, and gang violence"(National Youth Violence Prevention Resource Center, as cited in Lassiter, 2009). Two key differences between bullying (see evidence summary on School-Based Bullying Prevention) and school violence are that bullying involves an observed or perceived imbalance of power and is repeated or highly likely to be repeated.

Scope of the Problem

Violence at schools encompasses a wide range of behaviors, from homicide and spree shootings to various types of bullying (see evidence summary on School-Based Bullying Prevention). A broad picture of the incidence of these behaviors at schools is provided in *Indicators of School Crime and Safety: 2013* (Robers et al., 2014). Some of the key findings from this report are highlighted here.

Although serious school violence, such as the 2012 Sandy Hook Elementary School shooting in Newtown, Connecticut, tends to be highly publicized, the actual incidence of violent death and victimization that occurs at schools is actually lower than some may expect. Between the years of 1992 and 2011, the percentage of youth homicides at schools remained at less than 2 percent of the total youth homicides during those years, while suicides of youths at schools remained at less than 1 percent of the total number of youth suicides (Robers et al., 2014).

Other, nonfatal types of violence are more common, though generally have been declining over the last decade. Between 1992 and 2012, the total nonfatal victimization rates among students ages 12–18 generally declined at school, from 181 to 52 per 1,000 students (Robers et al., 2014).

Fights among students in grades 9–12 also occur more often outside of school than in school. For instance, in 2011, approximately 33 percent of students reported being in at least one fight outside of school in the past year, compared with 12 percent who reported being in a fight on school property in the past year (Robers et al., 2014). Between 1993 and 2011, weapon carrying in schools declined from 12 percent to 5 percent of students in grades 9–12 (Robers et al., 2014).

Rates of exposure to violence at school are still high, regardless of gender, age, type of school, or the geographic location of the school (Flannery et al., 2004). In their study of nearly 6,000 students, Flannery and colleagues (2004) found that over half of the youngest elementary school students had witnessed someone else being beaten up at school and that nearly 9 out of 10 high-school students had witnessed someone else being hit, slapped, or punched at school.

Risk Factors for Youth Violence

Research has identified a wide range of risk factors at the individual, family and community levels that are associated with youth violence. While these factors have been linked with a higher risk of being involved in youth violence, the association does not necessarily mean that any individual characterized by these factors is destined to become violent or victimized.

Individual risk factors associated with participation in or victimization through youth violence include a history of violent victimization; attention deficits, hyperactivity, or learning disorders; history of early aggressive behavior; involvement with drugs, alcohol, or tobacco; low IQ; poor behavioral control deficits in social–cognitive or information-processing abilities; high emotional distress; history of treatment for emotional problems; antisocial beliefs and attitudes; exposure to violence; and conflict in the family.

Peer and social risk factors for youth violence include association with delinquent peers, involvement in gangs, social rejection by peers, lack of involvement in conventional activities, poor academic performance, low commitment to school, and school failure (Centers for Disease Control and Prevention, 2015a). Risk factors related to the family include authoritarian childrearing attitudes; harsh, lax, or inconsistent disciplinary practices; low parental involvement; low emotional attachment to parents or caregivers; low parental education and income; parental substance abuse or criminality; poor family functioning; and poor monitoring and supervision of children (Centers for Disease Control and Prevention, 2015a).

Community risk factors for youth violence include diminished economic opportunities, high concentrations of poor residents, high level of transiency, high level of family disruption, low levels of community participation, and socially disorganized neighborhoods (Centers for Disease Control and Prevention, 2015a). While school-based programs address some of these risk factors, others are addressed in individual, family, and community-based interventions.

Impacts of School Violence

Exposure to violence in any setting has been shown to be related to many negative emotional and behavioral outcomes, including posttraumatic stress, anxiety, anger, depression, dissociation, and self-destructive and aggressive behavior (Flannery et al., 2004).
Violence in schools results in many negative outcomes, some more obvious than others. While death is an uncommon outcome of school violence, youths experience serious injuries,

including gunshot wounds and head trauma, as well as minor injuries such as cuts, bruises, and broken bones (Centers for Disease Control and Prevention, 2015b). Flannery and colleagues (2004) found a significant relationship between witnessing violence and psychological trauma; specifically, students who reported higher levels of exposure to violence at school also reported higher levels of psychological trauma, including anxiety, depression, posttraumatic stress, dissociation, and anger.

Witnessing and being victimized by violence at school are both significantly related to increased violent behavior (Flannery et al., 2004). Students who witness or are victims of violent behavior at school report greater engagement in violent behaviors, including threatening others; slapping, hitting, or punching; beating others up; and knife attacks (Flannery et al., 2004).

School violence has been shown to have negative impacts on academic performance (Hazler, 1996; Hoover & Oliver, 1996) and is related to refusal to go to school (Cullingford & Morrison, 1995).

Evidence-Based, School-Based Violence Prevention Programs

Many different types of school-based violence prevention efforts are used in schools across the world, but supportive evidence as to their effectiveness is limited. This section begins by providing a summary of school-based approaches that, while popular, lack empirical support, and concludes with a summary of school-based approaches that research has found to be more promising.

School-Based Approaches with Little Empirical Support

School Exclusion. These efforts include "zero tolerance" or "three strikes and you're out" policies. Students identified as exhibiting violent behavior are excluded from school. Research suggests that school exclusion interventions do not work, as they can decrease the reporting of incidents because the sanctions are so severe and because they negatively affect, through suspension or expulsion, the students who are most in need of prosocial involvement at school (Limber, 2003; StopBullying.gov, n.d.).

Environmental Design. Crime Prevention through Environmental Design (CPTED) is an approach used in schools to create a warm and welcoming environment, foster a sense of physical and social order, and manage access to school areas. CPTED efforts include *natural surveillance*, such as the placement of windows to maximize visibility; *access management*, which involves the use of signs to clearly indicate entrances and exits and the use of landscaping to limit access to certain areas; *physical maintenance*, including the repair and general upkeep of the school building and grounds; and *order maintenance*, such as maintaining an obvious adult presence during transitions between classes (Centers for Disease Control and Prevention, 2014). While the literature includes recommendations for using CPTED in schools, under the assumption that it will increase feelings of safety and security and decrease opportunities for school crime, no research has been conducted to determine the effectiveness of this approach.

Metal Detectors. To date, research on the use of metal detectors in schools has presented mixed, and sometimes contradictory, findings on the impact of these devices. Therefore, experts are

unable to determine whether they reduce the risk of violent behavior and gun carrying, or are related to negative perceptions of school safety (Hankin et al., 2011)

Police and School Resource Officers (SROs). Schools use police and SROs—who are generally sworn police officers—as safety experts and law enforcers, problem solvers and community liaisons, and educators; however, research has shown that as schools increase their use of police, they report more crimes to local law enforcement, especially for minor offenses (Na & Gottfredson, 2013; Justice Policy Institute, 2011). More rigorous evaluations of police in schools is needed to determine whether they have a positive effect on crime prevention in schools (Petrosino, Guckenburg, & Fronius, 2012; Na & Gottfredson, 2013).

School-Based Approaches with Empirical Support

Fortunately, other types of interventions have been shown by research to have a positive impact on school violence.

Curricular Approaches. Numerous curricula have been developed for use in schools. In general, programs that try to explain violent behavior and its effects teach strategies for avoiding violence, for intervening, and for building social cohesion among students. Some programs attempt to build children's social–emotional, social-information processing, and other skills to reduce aggressive and violent behavior. While many curricular approaches are universal in scope, such that they are delivered to schoolwide or classwide populations, others are programs delivered to students who are exhibiting risk factors for violent behaviors, or have demonstrated problem behaviors. Many of these programs have been evaluated, and some have been found to be effective in improving desired outcomes.

An example of a universal curriculum aimed at reducing impulsive and aggressive behavior while increasing social competence is Second Step, which is a classroom-based, social-skills program for children 4 to 14 years of age that teaches social–emotional skills. The program teaches children to identify and understand their own and others' emotions, reduce impulsiveness and choose positive goals, and manage their emotional reactions and decision-making processes when emotionally aroused. Signs of this program's success are presented in the Outcome Evidence section below.

An example of a program aimed at increasing competence, study skills, social skills, and self-control in aggressive children is the Coping Power Program (CPP), which is a 16-month, cognitive-based intervention delivered to aggressive children in fifth and sixth grade, to assist them with their transition to middle school. The program also entails 16 parent sessions, to increase parental involvement in children's education (Lochman & Wells, 2004). Research findings supporting this program's success are presented in the Outcome Evidence section below.

Comprehensive Approaches. Targeting the larger school community to change school climate and norms, comprehensive approaches encourage the adaptation of programs to address the specific needs of a particular school or community, as simply dropping prefabricated programs into place rarely works (Seeley et al., 2011; StopBullying.gov, n.d.).

One example of a widely used, comprehensive approach is the Safe & Civil Schools Positive Behavioral Interventions and Supports (PBIS) model. This multicomponent, multitiered, comprehensive approach to schoolwide improvement emphasizes staff communication, collaboration, and cohesion. The intervention provides tools and strategies to help educators in elementary, middle, and high schools establish proactive, positive (nonpunitive), and instructional schoolwide discipline policies, manage student misbehavior, foster student motivation, and create a positive and productive school climate. This approach has been widely studied and positive results of outcome evaluations are presented in the Outcome Evidence section below.

Outcome Evidence

While many evaluations of programs aimed at preventing school violence have been conducted, evidence as to the effectiveness of these programs has been mixed. Higher quality evaluations, including those that used quasi-experimental designs and randomized controlled group designs, indicate that curricular and comprehensive approaches in schools may be promising. Universal school-based programs have been found to decrease rates of violence and aggressive behavior at all school levels (elementary through high school) and across different populations, as well as improve truancy, school achievement, problem behavior, activity levels, attention problems, social skills, and internalizing problems (Hahn et al., 2007; Wilson & Lipsey, 2007). In an analysis of 53 national and international studies, Hahn and colleagues (2007) found that universal school-based programs can be effective with populations that have low socioeconomic status and/or high crime rates, with children with disabilities who are in in special schools, and with diverse ethnicities. Second Step is an example of a universal school-based curriculum that was found to increase prosocial behavior and decrease antisocial behavior in participants, compared with similar students who did not receive the intervention (Frey, et al., 2005; Grossman et al., 1997).

Universal school-based programs with a specific focus on social–emotional learning, as well as social-information processing, have also been found to reduce problem behaviors and negative outcomes. Durlak and colleagues (2011) found that reductions in conduct disorder and emotional stress were achieved with school-based, social–emotional learning programs, which were designed to foster the development of five interrelated sets of cognitive, affective, and behavioral competencies and provide a foundation for better adjustment and academic performance. Universal school-based, social-information processing interventions, which include training in cognitive-thinking skills that relate to interpreting and processing social situations, have been found to be promising for reducing aggressive behavior in school-aged children (Wilson & Lipsey, 2006).

Selected interventions, targeted at students exhibiting aggressive and violent behaviors, have also been found to be effective at reducing aggressive and disruptive behavior (Wilson & Lipsey, 2007, Mytton et al., 2002). Such programs were found to have greater effectiveness in older students, when administered to mixed sex groups rather than to boys alone, and when better implemented (Wilson & Lipsey, 2007, Mytton et al., 2002).

Comprehensive, schoolwide approaches, such as the Safe & Civil Schools Positive Behavioral Interventions and Supports (PBIS) model, have been found to have various positive effects. A

study of PBIS found that students in participating schools followed classroom rules on a consistent basis and that teachers reported a decrease in the frequent problems with widespread disorder in classrooms (Ward & Gersten, 2010). Additionally, PBIS has been shown to effectively reduce school suspensions (Bradshaw, Mitchell, & Leaf, 2010; Ward & Gersten, 2010).

Conclusions

School violence has been widely covered in both popular and academic literature. While serious violence and death in schools is less common than the media may lead one to believe, the impacts of school violence are widespread and can lead to serious long- and short-term problems, including physical, psychological, behavioral, and academic issues. Schools employ various efforts to reduce and prevent school-based violence. While some programs lack evidence regarding their efficacy, others have been shown to be effective at reducing problem behaviors and victimization in schools.

References

Bradshaw, Catherine, Mitchell, Mary, & Leaf, Philip. (2010). Examining the effects of schoolwide positive behavioral interventions and supports on student outcomes. *Journal of Positive Behavior Interventions 12*(3):133–148.

Centers for Disease Control and Prevention. (2014). *Youth violence: Using environmental design to prevent school violence.* Retrieved from http://www.cdc.gov/violenceprevention/youthviolence/cpted.html

Centers for Disease Control and Prevention. (2015a). *Understanding school violence* [Fact sheet]. Retrieved from http://www.cdc.gov/violenceprevention/pdf/school_violence_fact_sheet-a.pdf

Centers for Disease Control and Prevention. (2015b). *Youth violence: Risk and protective factors.* Retrieved from http://www.cdc.gov/ViolencePrevention/youthviolence/riskprotectivefactors.html

Cullingford, C., & Morrison, J. (1995). Bullying a formative influence: The relationship between the experience of school and criminality. *British Educational Research Journal, 21*, 547–561.

Durlak, Joseph A., Weissberg, Roger P. , Dymnicki, Allison B., Taylor, Rebecca D., & Schellinger, Kriston B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1):405–432.

Flannery, D. J., Wester, K. L., & Singer, M. I. (2004). Impact of exposure to violence in school on child and adolescent mental health and behavior. *Journal of Community Psychology*, *32*(5), 559–573.

Frey, K. S., Nolen, S. B., Van Schoiack-Edstrom, L., & Hirschstein, M. K. (2005). Effect of a school-based social-emotional competence program: Linking children's goals, attributions, and behavior. *Applied Developmental Psychology, 26,* 171–200.

Grossman, D. C., Neckerman, H. J., Koepsell, T. D., Liu, P. Y., Asher, K. N., Beland, K., & Rivara, F.P. (1997). Effectiveness of a violence prevention curriculum among children in elementary school: A randomized controlled trial. *Journal of the American Medical Association, 277*(20), 1605–1611.

Hahn, R., Fuqua-Whitley, D., Wethington, H., Lowy, J., Liberman, A., Crosby, A., … Dahlberg, L. (2007). The effectiveness of universal school-based programs for the prevention of violent and aggressive behavior: A report on recommendations of the Task Force on Community Preventive Services. *MMWR Recomm Rep*., *56*(RR-7):1–12.

Hankin, A., Hertz, M., & Simon, T. (2011). Impacts of metal detector use in schools: Insights from 15 years of research. *Journal of School Health*, *81*(2), 100–106.

Hazler, R.J. (1996). *Breaking the cycle of violence: Interventions for bullying and victimization*. Washington, DC: Accelerated Development.

Hoover, J.H., & Oliver, R. (1996). *The bullying prevention handbook: A guide for principals, teachers and counselors*. Bloomington, IN: National Educational Services.

Justice Policy Institute. (2011). *Education under arrest. The case against police in schools*. Washington, DC: Author.

Lassiter, William L. (2009). "What is school violence?" In W.L. Lassiter & D.C. Perry (Eds.), *Preventing violence and crime in America's schools.* Lanham, MD: Scarecrow Press, Inc.

Limber, Susan P. (2003). Efforts to address bullying in U.S. schools. *American Journal of Health Education, 34*(5):S-23–S-29.

Lochman, John E., & Wells, Karen C. (2004). The Coping Power Program for preadolescent aggressive boys and their parents: Outcome effects at the 1-year follow-up. *Journal of Consulting and Clinical Psychology*, *72*(4):571–578.

StopBullying.gov. (n.d.) *Misdirections in bully prevention and intervention*. Retrieved from http://www.stopbullying.gov/videos/2012/08/misdirections.html

Mytton, J., DiGuiseppi, C., Gough, D., Taylor, R., & Logan, S. (2002). School-based violence prevention programs: A systematic review of secondary prevention trials. *Archives of Pediatric and Adolescent Medicine, 156*: 752–762.

Na, C., & Gottfredson, D. (2013). Police officers in schools: Effects on school crime and the processing of offending behaviors. *Justice Quarterly, 30*(4): 619–650.

Petrosino, A., Guckenburg, S., & Fronius, T. (2012). Policing schools strategies: The review of the evaluation evidence. *Journal of Multidisciplinary Evaluation, 8*(17): 80–100.

Robers, S., Kemp, J., Rathbun, A., & Morgan, R.E. (2014). *Indicators of school crime and safety: 2013* (NCES 2014-042/NCJ 243299). Washington, DC: U.S. Department of Education, National Center for Education Statistics; and U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.

Seeley, Ken, Tombari, Martin L., Bennett, Laurie J., & Dunkle, Jason B. (2011). Bullying in schools: An overview. *Juvenile Justice Bulletin.* Office of Juvenile Justice and Delinquency Prevention.

Ward, B., & Gersten, R. (2010). A randomized evaluation of the effectiveness of Randy Sprick's Safe & Civil Schools' Foundations model for positive behavioral support at elementary schools in a large urban school district: Interim results. Portland, OR: ECONorthwest.

Wilson, Sandra Jo, & Lipsey, Mark W. (2006). *The effects of school-based social information processing interventions on aggressive behavior, part I: Universal programs: A systematic review*. The Campbell Collaboration.

Wilson, Sandra Jo, & Lipsey, Mark W. (2007). School-based interventions for aggressive and disruptive behavior: Update of a meta-analysis. *American Journal of Preventive Medicine, 33*(2 Supplemental): S130-S143.

Wong, Jennifer S. (2009). *No bullies allowed: Understanding peer victimization, the impacts on delinquency, and the effectiveness of prevention programs* (Unpublished doctoral dissertation). Pardee Rand Graduate School: Santa Monica, CA.

Suggested Reference: SAMHSA's National Registry of Evidence-based Programs and Practices. 2017. *School-Based Violence Prevention Programs. Evidence Summary.* Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from [insert hyperlink]