Articles

Nine Critical Elements of Promising Violence Prevention Programs

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ABSTRACT: To identify approaches to school-based violence prevention that are most promising and those that may not be effective, a review of the literature was conducted. In addition, telephone interviews were conducted with 15 experts on topics related to school-based violence prevention. Nine critical ingredients of promising approaches to violence prevention were identified. Specifically, the approaches are comprehensive and multifaceted; begin in the primary grades and are reinforced across grade level; are developmentally tailored; and cover appropriate content area. Appropriate content areas include information; unger management; social perspective taking; decision making and social problem solving; peer negotiation and conflict management; social resistance skills active listening and effective communication; and material on prejudice, sexism, ravism and male-female relation. In addition, promising programs use interactive teaching techniques, are culturally sensitive, and provide teacher training. They promote a positive school climate and foster norms against violence. Six violence prevention at twities that appear not to be effective are also discussed. The authors conclude with a discussion of the need for more rigorous evaluation of violence prevention programs. (4 Sch Health 1997-67(10):409-414)

The United States has the highest rates of violence in the industrialized worle. Violent and aggressive behavior surges to its highest point during the teen-age years. Compared to home and other community settings, school is actually one of the safest places where young people spend their time (Furlong, personal communication, 1996), yet the horror of even rare acts of violence in schools has galvanized national attention on increasing safety in schools. Unfortunately, federal funding initiatives for school violence prevention are minuscule compared to funding for prisons and law enforcement. Worse still, the fraction of the budget spent for school-based prevention has failed "to capitalize on the full range of empirically-tested, effective strategies" that exists.

To identify approaches to school-based violence prevention that are most promising and those that may not be effective, a review of the literature was conducted. In addition, telephone interviews were conducted with 15 experts on topics related to school-based violence prevention (Figure 1).

Interviews ranged from 30-90 minutes and were organized around two basic questions relevant to this study: "What do you think we know about what works in violence prevention?" and "Are there approaches that appear not to be effective (ie. may be a waste of time)?" In addition, these experts were asked specific questions about

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their own research. Based on the interviews, a preliminary list of key elements of promising violence prevention was compiled and mailed to the experts; seven experts (47%) returned comments, which were then used to further refine the set of key elements.

BACKGROUND

Considerable variability exists in the literature, in terms of how violence is defined (Gottfredson, personal communication, 1997). Violent behavior occurs on a continuum ranging from bullying and verbal abuse, through fighting. to rape and homicide. Although they are relatively infrequent in schools, weapons possession, gang activity, and serious acts of violence have captured media attention. Experts agreed that it is appropriate for schools to be interested in reducing the daily disruptions such as name-calling, bullying, and general intimidation, which spoil the school climate and are themselves precursors to more serious acts of violence (Ducette-Gates, personal communication, 1996; Flay, personal communication, 1996. Furlong, personal communication, 1996; Gottfredson, personal communication, 1997; Yung, personal communication, 1996). Broadly defined to include less serious acts. violence prevention may be more attractive to schools because it provides a rationale and strategy for reducing disorder (Tolan, personal communication, 1996; Stephens, personal communication, 1996; Yung, personal communieation, 1996) that "erodes the school's ability to maintain order and conduct its business" (Gottfredson, personal communication, 1997), and for improving school climate

Causes of school-related violence have been examined in numerous studies: According to Gottfredson, schools in disadvantaged, disorganized communities have been found

Figure 1 Experts on School-Based Violence Prevention

Larry Cohen

Project Director, Education Development Center

Anne Ducette-Gates

Project Manager, Macro International

Delbert Elliot

Director / Center for the Study and Prevention of Violence University of Colorado at Boulder

Brian Flay

Director, Violence Prevention Research Center

School of Public Health

University of Illinois at Chicago

Mike Furlang

Associate Professor / Graduate School of Education

University of California

Denise Gottfredson

Associate Professor

University of Maryland

Nancy Guerra

Associate Professor / Dept. of Psychology

University of Illinois at Chicago

Rodney Hammond

Director, Division of Violence Prevention

Centers for Disease Control and Prevention

Elena Nightingale

Scholar in Residence / Institute of Medicine

National Academy of Sciences

Kenneth Powell

Division of Violence Prevention

Centers for Disease Control and Prevention

LeRoy Reese

Dept. of Psychology

Chicago State University

Christopher Ringwalt

Research Health Analyst

Center for Social Research and Policy Analysis

Research Triangle Institute

Ronald Stephens

Executive Director

National School Safety Center

Patrick Tolan

Associate Professor/Director

Research Institute of Juvenile Research

University of Illinois at Chicago

Betty Yung

Director/Associate Professor

Center for Child

and AdolescentViolence Prevention Ellis Institute

School of Professional Psychology

Wright State University

to have higher rates of violence, as do schools in areas where drugs, alcohol and/or weapons are readily available. Weak school leadership and disorganization, low emphasis on academies, lack of support for students, and unclear rules and norms also correlate with higher rates of violence."

A number of individual characteristics seem to be related to violence, including a student's low attachment to school and low commitment to education, poor school performance, and belonging to a negative peer group. Violence also seems to be related to a variety of personal characteristics, including impulsiveness, low self-control, and rejection by peers prior to adolescence —— especially in combination with shyness, low social competence, and attitudes in favor of breaking the law or using drugs (Gottfredson, personal communication, 1997).

While several studies of school-based violence prevention are currently under way," rigorous long-term evaluation studies of violence prevention curricula do not currently exist. Many of the most promising approaches are derived from theoretical assumptions and/or findings from other prevention fields where strong, longitudinal evaluation studies have been conducted, such as substance abuse prevention studies.

During the 1980s, the Office of Juvenile Justice and Delinquency Prevention' demonstration project funded 18 school-based approaches. Schools involved in the research project became safer, demonstrating that violence prevention in schools can work. However, in terms of effectiveness, variability across studies underscores the need for definitive studies to determine the precise strategies or components of programs that are effective in reducing aggression and violence.

NINE KEY COMPONENTS OF EFFECTIVE PROGRAMS

1. A comprehensive, multifaceted approach that includes family, peer, media, and community components was viewed by experts as critically important. "A ha" In good prevention programs, new skills are reinforced in various settings (home, school, community) to promote generalization and the likelihood that new skills will become well-established parts of the individual's repertoire. In addition, research suggests i students who feel strongly connected to family, community, and school are at lower risk for violence. This fact leads researchers to posit that programs promoting a student's bond to various positive institutions will be effective at reducing violence. Of course, experts (Yung, personal communication, 1996) acknowledge that developing and implementing comprehensive, multifaceted approaches present many challenges. from coordinating different community organizations and navigating community politics to getting parents to participate.

A combination of universal and targeted strategies is useful as well (Hammond, personal communication, 1997). Violence is prevented, ultimately, when students avoid conflict with skills learned through universal strategies designed for all students and when conflicts that do occur are resolved through targeted approaches. Classroom curricula are universal approaches when they train students

to use skills necessary to avoid conflict. Mediation programs exemplify targeted approaches, since they identify students involved in a dispute and work to achieve a peaceful resolution.

- 2. Programs should begin in the primary grades and be reinforced across grade levels. Experts concur that prevention programs should begin early, by first grade or before, where possible (Hammond, personal communication, 1997; Powell, personal communication, 1996) and be reinforced across the school years. Good programs promote the development of important personal and social skills. While serious acts of violence typically increase during adolescence, the development of basic personal and social skills can and should begin much earlier.
- 3. Developmentally tailored interventions are important.^{6,7} (Hammond, personal communication, 1997). Because social situations in which violence occurs change as a person ages, it is reasonable to expect that interventions will only be effective when they appreciate the developmental stage of their target audience; however, no studies have been conducted to test this assumption (Flay, personal communication, 1996). The research literature contains numerous examples of how risk factors for delinquency, aggression, and violence appear to be age and stage specific (Elliot, personal communication, 1997). For example, a frequent assumption is that employment will lower the risk for drug abuse and violence. And indeed, employment after high school, if one is not going on to college, does appear to be a protective factor. However, research shows that employment prior to high school graduation actually puts students at risk for drugs and violence, perhaps because it is associated with less supervision by parents and less interest in completing school (Elliot, personal communication, 1997), or because it provides a source of eash to buy drugs.

Similarly, before adolescence, rejection by peers is a risk factor for aggression and violence. But during adolescence, participation in and acceptance by certain peer groups are associated with greater risk for drugs and violence. Thus, what is a risk factor at one stage can be a protective factor during another. The complexities of these relationships raise a number of questions concerning the appropriateness of different interventions, which research has yet to address.

4. Programs content should promote personal and social competencies. The most promising programs reflect strong theoretical foundations, "most often social learning theory," but also anger replacement therapy or attribution theory," to name but a few.

The following paragraphs describe the personal and social competencies and skills that should be promoted in program content:

Information about the negative consequences of violence for the perpetrator, victims, victims' families and friends, bystanders, and society at large should be provided. While it appears reasonable that programs include this focus, no studies have compared programs with and without this content to conclusively determine its relative impact (Flav. personal communication, 1996).

Anger management teaches students self-control, how to recognize a situation that might get out of control, and how to deal with a situation without physical contact. Students need to recognize their "triggers" or "fuses" that lead to

conflict and violence." Stephens (personal communication, 1996) observed, "Violence is nothing more than the tangible expression of unresolved conflict. Learning anger reduction skills to avoid conflict is critical."

Social perspective-taking: teaches students that others can have a different (equally valid) and less anger-producing perspective on the same situation. Research in attribution theory suggests that hostile kids will attribute negative things to neutral situations, such as believing someone spilled their milk or bumped into them on purpose. The egocentrism of adolescence tends to aggravate this; developmentally, adolelescents would have difficulty believing that everything that happens is not directed at themselves personally. From a developmental standpoint, social perspective-taking may be difficult to teach students under 12 years of age.

Decision-making and social problem-solving skills, which include how to identify a problem, generate alternative solutions, evaluate consequences, and select the best action, are among the key components. Peer negotiation and conflict management skills are critical parts of effective violence prevention and should include training in how to accept negative feedback.

Resisting peer pressure is a valuable skill. Peers play an important role in causing fights when they spread "he said/she said" rumors, as well as when bystanders help provoke participants to fight. Training in how to effectively resist peer influences, while at the same time maintaining friendships, is important.

Active listening and effective communication (Gottfredson, personal communication, 1997) can prevent misunderstandings as they help individuals express feelings, give "I-messages," and speak assertively. These skills also include an ability to give and receive positive and negative feedback.

Material on prejudice, sexism, racism, and male-female relationships can be effective." Experts felt that all programs should "focus on courtesy, compassion, earing, and respect for one another" (Stephens, personal communication, 1996), though some believed that specific material in these areas may also be necessary, especially material related to male-female relationships (Flay, personal communication, 1996).

- 5. Interactive techniques such as group work, cooperative learning, discussions, and role plays or behavioral rehearsal facilitate the development of personal and social skills. Because these methods are more engaging to students and offer opportunities to practice the needed social skills, relying solely on didactic teaching techniques such as lectures will be much less effective (Hammond, personal communication, 1997).
- 6. Ethnic identity/culturally sensitive material should be matched with the characteristics of the target population." While experts agreed that programs have the highest chance of success when they address the needs of the community in a way that is relevant and meaningful." (Hammond, personal communication, 1997; Reese, personal communication, 1997), there was considerable uncertainty about what that exactly means among many of the experts interviewed. There are a range of ways programs attempt to make their materials sensitive and appropriate for different cultures.

In their introductions, prevention programs designed for

general classroom audiences sometimes provide discussions about the importance of cultural sensitivity to the students in the class. Some go further, providing suggestions within lessons on how to present material depending on the make up of the class. The challenge, of course, is that most schools in the United States are integrated, and virtually each classroom has a unique mix of racial and ethnic identities.

Programs for African-American males, the segment of the population at highest risk to become victims of violence, sometimes include a "rites of passage" component that typically consists of some type of initiation process — such as camping in the wilderness — along with a graduation ceremony, to instill a sense of cultural pride. Programs strive to promote ethnic identity because this is viewed as a theoretical prerequisite to appreciating diversity and respecting others (Ringwalt, personal communication, 1997). Ethnic identity programs look very promising but are often done in conjunction with cognitive behavioral problem solving, so what their operative ingredients are or what the value of their ethnic identity material will be has not yet been determined. Further, there may be a danger that ethnic identity material might instill too strong a sense of ethnic pride, leading to prejudice against other ethnic

An alternative strategy (Stephens, personal communication, 1996) would be to emphasize the "need to be courteous and show respect for every child. Such behavior cuts across and transcends any racial or ethnic identity. It is important to understand what courtesy and respect mean and how they are shown in each culture."

7. Staff development/teacher training ensures that a program will be implemented as intended by the program developers," which is critical if programs are to be effective. Because some teachers are uncomfortable or less skilled in using interactive techniques, training in how to use interactive techniques is especially important. Moreover, in violence prevention, teachers must learn to implement and model conflict management strategies when handling volatile situations during regular classroom activities; again, training is critical. Staff should also have training in how to deal with crises and how to handle a weaponwielding student. Finally, the teacher is in an important position to recognize problems related to violence and aggression, given appropriate training (Stephens, personal communication, 1996), and can refer students to appropriate resources in or out of school.

8. Activities designed to promote a positive school climate or culture (Gottfredson, personal communication, 1997) should be elements of effective classroom management strategies promoting good discipline, because positive control in the classroom is essential to effective implementation of violence prevention programs. Beyond this, the organization and function of a school are also essential in determining a school's readiness to adopt and sustain violence prevention programs, and these qualities have been shown to predict aggression and violence among students.

Schools can be made safer in numerous ways. For example, schools can reinforce things in the environment that enhance natural supervision. Some schools stagger the time periods when students change classes in order to reduce the number of students in the hall at any given time. A similar

strategy is to have teachers stand in the hall and supervise during these passing periods. Both strategies show promise in reducing "rough housing."

Schools can improve safety simply by changing the physical environment. Stephens (personal communication, 1996) suggests schools assess the extent to which spaces students pass through are "light, open, safe, and promote natural supervision." Closets can be locked, or their doors can be removed, and stairs can be better illuminated. Landscaping can be used to open up spaces further. The idea is to focus on and develop positive elements within the environment to make schools attractive, safe, and welcoming. Experts preferred changes that show schools value students. These can include basic repairs and structural changes. Indeed, when the physical plant of the school is dangerous or unhygienic it tells students that "nobody cares." The physical condition of schools — with ceilings and walls that are not crumbling, etc. - should make students feel as safe as possible (Nightingale, personal communication, 1996).

9. Activities should be designed to foster norms against violence, aggression, and bullying. Schools can actively create a culture where peace is the norm, where violence is not tolerated. Activities include school fairs designed to educate students and faculty about how to prevent violence and resolve conflict; curriculum activities teaching students that most people believe peace is "cool"; and school policies, rules, and regulations, designed to prevent bullying, aggression, and violence.

The way schools handle aggression sends a message to students about whether violence and aggression will be tolerated. The effects of norms are cumulative over the years. By the end of elementary school or middle school or high school, striking differences will exist in the behavior and attitudes between students in schools where aggression is tolerated and students in schools where aggression is not tolerated. By the end of six years, the difference will be great between students from schools with different types of norms (Tolan, personal communication, 1996).

Where they do not already exist, clear and specific norms regarding violence must be established, including policies, rules, and regulations that spell out the consequences for violations. Standard violence prevention policies include prohibition against fighting and precursors to fighting. These include prohibiting name calling, gang colors, gang symbols, oversized clothing that can hide weapons, weapons, graffiti, and vandalism, as well as establishing dress codes, school uniforms, weapon-free zones, and clear back backs. Violations of these policies can encompass a range of positive consequences, such as conflict resolution training and community service, and negative consequences, such as school suspension. Whether policies are appropriate depends on the context of a particular school. For example, a "no gang colors" policy would not make sense in an area that has no gangs. Experts were concerned that policies presented only in negative ways suggest to students "we do not value or trust you" (Nightingale, personal communication, 1996). Indeed, most experts surveyed saw school policies as focusing too much on the negative, though they pointed out that negative statements were sometimes necessary to maintain a safe environment. Research indicates that policies that are positive are more effective than those that are more punitive.1944

Ideally, experts argued that there should at least be a balance of negative and positive. Society needs to show that it values students and their learning environment. Involving students in establishing policies may make policies more likely to work, because students have ownership.

SIX COMPONENTS THAT MAY NOT WORK

Experts also raised concerns about certain activities which, although conducted in the name of preventing violence, they believed showed little promise in violence

prevention and could even increase aggression or violence.

- 1. Using scare tactics that show pictures or videos of violent scenes. The concern, based on considerable research (Yung, personal communication, 1996), is that people who witness violence in media are more likely to be violent themselves.
- 2. Adding a violence prevention program to a school system that is already overwhelmed. Unless violence prevention is clearly established as a priority, it increases the burden on teachers, increases stress, and ulti-

Figure 2	
Research Groups Conducting Rig	orous Evaluations

Project Name	Contact	Features
Richmond Youth Against	Dr. Aleta Meyer	16 sessions
Violence Project	Dept. Of Psychology, Box 842018	School-based
	Virginia Commonwealth University	Sixth grade
	Richmond, VA 23284-2018	Sixin grade
	804/828-0015	
The Safes Dates Project	Dr. Vangie A. Foshee	School- and community-based
	Curriculum in Public Health Nursing	Theater production, 10 sessions
	267B Rosenau Hall	Curriculum and poster contest
	University of North Carolina	Services for teens in violent relationship
	Chapel Hiil, NC 27599-7400	and provider training
	919/966-6616	
SMART Talk	Dr. Kris Boswortn	
Site and Talk	Smith Chair in Substance Abuse	Eight modules
		Multi-media, computer-based
	College of Education / P.O. Box 210069	Middle school students
	University of Arizona	
	Tucson, AZ 85721	
	520/626-4350	
Self-Enhancement Inc.	Dr. Roy M. Gabriel	Middle and high school students
	RMC Research Corp.	High-risk community
	522 SW Fifth Ave., Suite 1407	Classroom, field trips, and media
	Portland, CR 97204	tribal tribal tribal
	503/223-8248	
BrainPower Program	Dr. Cynthia Hudley	Latin Act Act
oranie ower erogram	Graduate School of Education	Latino and African American males
		Targeted at aggressive youth
	University of California Santa Barbara, CA 93106	School-based, grades 4 - 6
	805/893-8324	
PeaceBuilders	Dr. Dennis D. Embry	School-wide program
	Heartsprings, Inc.	Grades K - 5
	P.O. Box 12158	Students, teachers, administrators
	Tucson, AZ 85732 or 800/368-9356	and the second of the second o
Metropolitan Area Child Study	Dr. Rowell Huesmann	Sahaal and family
		School-and family-based
	Research Center for Group Dynamics	Curriculum and small group sessions
	Institute for Social Research	Parent skill building
	University of Michigan	
	426 Thempson St.	
	Ann Arbor, MI 48106-1248	
	313/764-8385	

mately backfires. Schools must have an organization that supports violence prevention.

- 3. Segregating aggressive or anti-social students into a separate group for any purpose. This establishes a negative peer group and can be counter-productive. Research clearly demonstrates that while inserting a delinquent student into a positive, non-delinquent peer group can have positive effects, separating and creating groups of delinquent or aggressive youth does not reduce problem behavior and may even increase criminal activity (Elliot, personal communication, 1997).
- 4. Using instructional programs that are too brief and not supported by a positive school climate. While no research has been done in violence prevention to determine the most appropriate number of sessions per year or years of intervention, research in the area of drug abuse prevention suggests that programs should be at least 10 sessions long in the first year, at least five sessions long in subsequent years, and at least three years in duration if programs are to be effective."
- 5. Using programs that focus exclusively on self-esteem enhancement. Such programs have been shown in the literature to be ineffective. Indeed, gang-affiliated youth have very high self-esteem (Ducette-Gates, personal communication, 1996), and are very violent. However, self-esteem enhancement done within the context of a more comprehensive approach to personal and social competency promotion may have value.
- 6. Using programs that only provide information. These programs do not succeed because they do not help students develop skills necessary to avoid and handle conflict.

CONCLUSION

In the area of violence prevention, the need for programs in schools and other institutions that work with youth has moved at a faster pace than the availability of solid evaluation research. However, rigorous research in school-based violence prevention is urgently needed because "there currently are so many programs affecting so many adolescents, families, schools, and communities at such large cost and operating under the aura of so much promise. Wellintentioned efforts are being applied to many children and adolescents without any indication of their effects." While results from longitudinal studies are not yet available, some of the most rigorous research in violence prevention is being funded by the Centers for Disease Control and Prevention (CDC). Most of these studies are randomized, many with large sample sizes. Figure 1 presents a list of contact information about research groups with promising preliminary findings currently funded by CDC to evaluate violence prevention programs.

All programs being marketed to schools should be evaluated to determine their effectiveness using, at a minimum, pretest, post-test, and control group designs with measures of aggression as an outcome behavior. Programs should also include evaluation procedures and tools that can be used to assess student progress. These tools should enable schools to collect information about behavior based on observations, such as parent or teacher ratings of behavior, and on other independent sources, such as reports on fighting and school suspensions.

According to Gottfredson (personal communication, 1997), the key elements of school-based violence prevention programs are important and necessary, but perhaps not sufficient to improve school safety. Programs that contain the key elements can work only in schools that have the capacity to sustain them. "In schools where teachers and administrators have given up their roles as agents of social control, these programs have little chance of success. The climate and culture of the school, and the culture of the larger community must be attended to, first" (Gottfredson, personal communication, 1997).

Finally, a major weakness in current efforts to prevent violence involves the period after an intervention ends (Elliot, personal communication, 1997), when students leave the controlled situation of an instructional program or a positive school environment and return to environments where reinforcers and incentives to avoid conflict and violence are not present. The key to success is identifying strategies and programs that can be sustained and generalized across settings. Schools cannot do it alone: partnerships among school, community, and family are necessary to launch successful violence prevention campaigns.

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