

## **What Works in Youth Violence Prevention**

**Dewey G. Cornell**

Virginia Youth Violence Project

University of Virginia

April 25, 1999. A version of this paper appears as a chapter in Cornell, D., Loper, A., Atkinson, A., and Sheras, P. (1999). Youth Violence Prevention in Virginia: A Needs Assessment, prepared for the Virginia Department of Health. For additional information call 804-924-8929.

## What Works in Youth Violence Prevention

For many years violence prevention strategies have been based largely on theoretical or ideological assumptions about "what works," in the absence of objective, scientific evidence. Indeed, so many ill-conceived strategies were so often found to be ineffective, that many delinquency prevention critics popularized the cynical view that "nothing works." Such a pessimistic view is no longer tenable. Juvenile violence can be prevented and juvenile offenders can be rehabilitated. One goal of this report is to bring attention to the existence of a substantial and growing body of scientifically credible evidence which can be used to implement sound and cost-effective prevention programs.

This chapter will present a selective overview of prevention strategies found to reduce juvenile violence and associated problems such as substance abuse, property crime, and disruptive behavior. Readers interested in the scientific evidence can turn to several extensive, quantitative evaluations of literature (Greenwood, Model, Rydell, & Cheisa, 1998; Lipsey & Wilson, 1997; Sherman et al., 1997).

Some caveats: No strategy is effective for all youth or all settings. Every prevention program will have youth who fail, and unfortunately, failure inevitably receives more attention than success, and can distort perceptions of program effectiveness. All programs are vulnerable to these misperceptions if they fail to routinely and rigorously document overall success rates. Programs which can reduce violent crime by even 10-20% are likely to be cost-effective, in light of the high cost of juvenile crime for victims, communities, and the criminal justice system.

Finally, even the best validated program will not succeed if it is not adequately funded and faithfully implemented by competent staff. A new treatment program must be sufficiently well specified in training manuals and guides, or through supervisory oversight by qualified practitioners, that it can be replicated in a new setting. More generally, programs must demonstrate adequate treatment fidelity, i.e., they must faithfully implement the actual treatment program as it was designed. All too often programs have rushed to implement new treatment programs without adequate training and preparation, so that treatment failure is a result of poor implementation, not an inadequate treatment model (for example, see Henggeler, Melton, Brondino, Scherer, & Hanley, 1997). Staff training and general quality control have often been neglected in prevention settings.

### Effective Prevention Strategies

Community-wide	Family-focused	School-based
Mentoring	Parent education	Conflict resolution training
Supervised recreation	Family therapy	Violence prevention counseling
Community policing	Preschool programs	Social competence development
		Bullying reduction
		Drug education

#### Community-Wide Strategies

##### Mentoring

Mentoring is a relatively inexpensive program in which adult volunteers spend time each week with children or adolescents, typically engaged in recreational or educational activities. A controlled experiment with 959 youth in 8 cities found that the Big Brothers/Big Sisters program resulted in a 46% reduction in drug use, a 32% reduction in hitting people, and a 52% reduction in truancy (Grossman & Garry, 1997; Tierney & Grossman, 1995). Big Brothers/Big Sisters of America can be contacted at 215-567-7000.

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) supported the expansion of mentoring efforts through its Juvenile Mentoring Program (JUMP; OJJDP, 1998). JUMP has funded 93 mentoring projects as well as 6 SafeFutures community grants which include mentoring programs. Mentoring is also supported through the State Formula Grants program of the Juvenile Justice and Delinquency Prevention Act.

Despite the widespread popularity of mentoring, there has been relatively little research on the characteristics of successful mentors or successful mentoring relationships. What criteria should be used in selecting mentors and matching them to youth? How should mentors proceed to establish positive relationships with at-risk youth? These are important questions since some studies report that approximately half of mentor pairings fail to develop into ongoing relationships (Freedman, 1993; Morrow & Styles, 1995).

A descriptive study by Morrow and Styles (1995) offered some hypotheses and directions for future research. The authors distinguished between “developmental” and “prescriptive” styles of mentoring. Developmental mentors were more flexible and relationship-focused in their approach to their youth, while prescriptive were more directive and tended to prescribe activities and topics of discussion. At follow-up nine months later, developmental mentors were more likely to still be working with their little brothers/sisters while most prescriptive relationships had terminated.

##### Supervised recreational programs

The peak times for juvenile crime occur during the hours immediately after school (Sickmund, Snyder, & Poe-Yamagata, 1997). The level of juvenile offending at 3 pm on school days is over three times greater than it is at noon or midnight. Many youth are unsupervised after school because their parents are at work. The lack of coordination between school and work in our society is an underlying structural problem in controlling juvenile crime. For this reason,

after-school programs are of great potential value and deserve serious consideration in prevention planning for any community.

Most recreational programs have not been adequately tested. For example, there is little hard evidence concerning midnight basketball. However, several controlled studies have found that well-supervised after-school recreational programs substantially reduce juvenile crime, drug use, and vandalism. The Boys & Girls Club recreation and drug prevention program (Schinke, Orlandi, & Cole, 1992) was effective in two studies conducted in a series of public housing projects. A Canadian study (Jones & Offord, 1989) of another intensive after-school program (using sports, music, dancing, and scouting) demonstrated a 75% reduction in juvenile arrests, while arrests at a comparison site rose 67%.

The Boys & Girls Clubs of America has over 1,700 affiliated clubs serving over 2.2 million children (Bureau of Justice Assistance, 1995). Clubs provide a wide range of educational and counseling recreational services in addition to recreational programs. The mission of the Boys and Girls Clubs is to provide supervised recreational and educational programs to at-risk youth. Specific programs vary from club to club depending on what is needed in the community. A study of ten Boys & Girls Clubs by the U.S. Office of Substance Abuse Prevention reported 22% lower levels of drug activity and increased levels of parent involvement (Schinke, Cole, & Orlandi, 1991). A rigorously designed three-year longitudinal study of 16 Clubs in eight states (St. Pierre, Mark, Kaltreider, Aikin, 1997) also found reductions in alcohol and drug use, particularly in clubs which included active parent involvement. Clubs typically are open 5-6 days a week for 4-5 hours each day and are staffed by full-time youth workers as well as volunteers. Contact Boys & Girls Clubs of America (404-815-5751) or the Bureau of Justice Assistance Clearinghouse (800-688-4252).

## Community policing

For the most criminally active and dangerous gangs, no method has more demonstrable success than aggressive law enforcement leading to the arrest and incarceration of gang leaders. Although new leaders may emerge in some cases, in many instances gangs have been neutralized or eradicated (Bureau of Justice Assistance, 1997). One of the more effective means of preventing firearm-related juvenile crimes is stringent enforcement of laws against illegal gun carrying (Kennedy, Piehl & Braga, 1996; Sherman et al., 1997).

In its report, "Promising strategies to reduce gun violence," the U.S. Department of Justice describes 60 methods of responding to gun violence (Sheppard, 1999). These methods focus on three basic strategies: interrupting the supply of illegal guns, deterring illegal possession of guns, and aggressive prosecution and sentencing of those who commit gun violence or illegally supply guns to juveniles. For additional information contact the Juvenile Justice Clearinghouse at 800-638-8736).

Recently the National Institute of Justice (NIJ; Sherman et al., 1997) released a massive report on "what works" in preventing crime, based on reviews of hundreds of studies. Among the most effective policing strategies are:

- increased patrol of high-crime street corners
- arrests of serious repeat offenders
- arrests of drunk drivers.

Notably ineffective policing practices are:

- neighborhood block watches
- arrests of juveniles for minor offenses
- drug market arrests.

Community policing is a broad term and some programs labeled as community policing are not effective (Sherman et al., 1997). The most effective community policing programs seemed to have strong community participation in priority setting and a problem-oriented focus. Also noteworthy is the new research emphasis on the importance of strengthening police credibility and legitimacy with the general public, which suggests that it is important from a prevention perspective for police officers to maintain trust and respect through the quality of their everyday interactions with citizens (Tyler, 1990). Contact the Bureau of Justice Assistance (800-421-6770). The NIJ report is available through the world wide web (<http://www.ncjrs.org/works/>).

## Family-Focused Strategies

### Parent education

Parents can be taught to be effective in managing their children's behavior, but a brief course is not sufficient. Effective programs involve parents in ongoing relationships and training sessions that last from six months to several years. This investment pays off in reduced delinquency and better school adjustment for many years afterwards. Several parent education programs are available from the Communities That Care organization (Hawkins & Catalano, 1992), and can be obtained from Developmental Research and Programs, Inc. (800-736-2630).

There is good research evidence that parent management training is effective with aggressive and disobedient children (Brestan & Eyberg, 1998; Cedar & Levant, 1990; Kazdin, 1997). Parent training for families with aggressive young children is a verifiably cost-effective strategy for preventing future crime (Greenwood, Model, Rydell, Chiesa, 1998). Here are some of the more well-validated approaches to parent education:

-- Parent Management Training for Conduct Disordered Children is the most influential parent training model for antisocial children. Developed by Patterson (1992) at the University of Oregon Social Learning Center, the program teaches parents more effective methods of disciplining and managing their children.

-- The Barkley Parent Training Program provides an explicit manual used widely to train parents of children with severe behavior problems (Barkley, 1997). The program teaches a 10-step model supported by regular consultation with a therapist.

-- The Parenting Program for Young Children developed by Carolyn Webster-Stratton (Webster Stratton, 1982, 1992, 1997, 1998) is a well-validated psychosocial intervention program. This 24-week program is delivered to groups of parents in 2-hour weekly meetings using video vignettes to demonstrate positive parenting techniques.

-- Family and Schools Together (FAST) is a more comprehensive program which incorporates parent training and home visits along with school-based efforts to improve the social skills and academic performance of elementary school children. FAST has been implemented in more than 26 states. Notably, the program has a high retention rate; 88% of the families which attend one multifamily session go on to complete the program (Conduct Problems Prevention Research Group, 1992; McDonald, Billingham, Conrad, Morgan, et. al, 1997).

As part of parent education, parents should also be encouraged to limit their children's exposure to violent television shows, movies, and video games. Despite mixed public opinion, and objections by the media industry, there is extensive, conclusive research establishing that television violence has a detrimental effect on children (American Psychological Association, 1997; Donnerstein, Slaby, & Eron, 1994; Hughes & Hasbrouck, 1996). Numerous formal experiments in clinical settings and schools, as well as long-term prospective field studies following young children into adulthood, demonstrate conclusively that exposure to media

violence increases aggressive behavior. Among the effects of media violence are that children learn to expect and anticipate violence in their daily life, they are desensitized to violence and may even develop positive attitudes toward the use of violence, they may fail to fully appreciate the negative consequences of violence, and in some cases they engage in violence because they believe it to a source of social status or an effective way to solve problems.

Few social influences are more pervasive than entertainment media violence, yet it has been difficult to convince parents to make greater efforts to supervise their children's viewing habits. In some respects, this represents a public health problem comparable to other public health challenges, such as reducing smoking, increasing exercise, and improving diet. Like smoking, the adverse effects may develop slowly over a long period of time, and only a small proportion of the population may experience the worst outcomes. Moreover, well-ingrained habits -- whether it be smoking, over-eating, or watching too much television -- are difficult to change in part because they are so commonplace and socially acceptable. Sustained, widespread public educational efforts undoubtedly have made a difference in such areas as smoking and diet, so it is reasonable to assume that comparable efforts also might be effective. In Canada, a highly successful, grassroots campaign to reduce television violence had substantial impact on national viewing habits as well as media policy and industry practices. For information on this effort, contact the Canada Radio-television and Telecommunications Commission in Canada (CRTC Public Affairs, Ottawa, Ontario, K1A 0N2; telephone 819-997-0313).

### Family therapy

Family therapy refers to a host of different treatment approaches linked by their common emphasis on treating the whole family rather than individuals. The literature on family therapy is too extensive to summarize here. Functional family therapy (Alexander & Parsons, 1982) is one form of family therapy which has been especially effective with delinquent youth. Treatment makes use of cognitive and behavioral methods to improve family relationships and increase reciprocity and cooperation among family members. Outcome studies demonstrated that functional family therapy improved family relationships and reduced recidivism among adolescents referred by juvenile court for offenses such as truancy, theft, and unmanageable behavior (Klein, Alexander, & Parsons, 1977).

Multisystemic therapy (Family Services Research Center, 1995; Henggeler, 1991) is one of the most cost-effective and demonstrably effective treatments for high-risk or delinquent children and their families. In controlled outcome studies, multisystemic therapy has proven to be superior to standard treatments for chronic juvenile offenders, inner-city at-risk youth, child-abusive families, and other traditionally difficult populations. Multisystemic therapy is a relatively short-term (1-6 months) but intensive form of therapy which is aimed at strengthening family functioning.

A hallmark of the multisystemic approach is the therapist's role as a problem-solver who works closely with parents to identify and remedy problems in a wide variety of areas, ranging from a child's school attendance to marital discord. Typically, therapists begin treatment by visiting the family several times a week for sessions ranging from 15 to 90 minutes, and later

gradually taper contacts prior to termination. Therapists make flexible use of family therapy, parent education, and cognitive-behavioral techniques to improve family relationships, strengthen parental authority and effectiveness, and modify children's behavior. This approach is carefully described in a treatment manual (Henggeler, 1991; see also Henggeler & Bourdin, 1990). It is important that therapists faithfully adhere to MST principles and procedures for this treatment to be effective; a recent study (Henggeler, Melton, Brondino, Scherer, & Hanley, 1997) found that MST effectiveness declined when therapists failed to follow the treatment model. Information is available from the Family Services Research Center for the Medical University of South Carolina (803-792-8003).

### Preschool programs

There is extensive evidence that some preschool programs, especially when combined with weekly home visits over a period of years, can have substantial, long-term impact on families and the quality of a child's adjustment (Tremblay & Craig, 1995; Yoshikawa, 1994). Some programs like the Perry Preschool Project found that children randomly assigned to the preschool and home visit program not only did better in school than control children, but had fewer arrests as juveniles and adults (Berreuta-Clement, et al., 1985). A strength of the Perry Preschool Project was its emphasis on facilitating parent involvement in children's academic and social development. Information on early childhood programs can be obtained from Project Head Start (202-205-8572) or the National Association for the Education of Young Children (800-424-2460).

The most up-to-date analysis and synthesis of the evidence is contained in a recent RAND report, Investing in our children: What we know and don't know about the costs and benefits of early childhood interventions (Karoly, Greenwood, Everingham, Hoube, Kilburn, Rydell, Sanders, & Chiesa, 1998), available from RAND Distribution Services (310-451-6915 or e-mail [order@rand.org](mailto:order@rand.org)). This report distinguishes between the weak evidence supporting many programs and strong evidence in support of several programs which have verifiable, long-term benefits.

### **School-based programs**

#### Conflict resolution and peer mediation

The heart of conflict resolution is teaching students to listen carefully and respectfully to another person's point of view, accept that there are meaningful differences, and develop creative, mutually satisfactory solutions. Furthermore, students can be taught to mediate disputes between peers by facilitating a dialogue through which disputants find their own solution. The National Institute for Dispute Resolution estimates that there are over 8,500 conflict mediation programs nationwide. Although stand-alone peer mediation programs have not been examined in rigorous, controlled outcome studies (Gottfredson, 1997), there is more convincing evidence in support of comprehensive programs incorporating peer mediation and other forms of conflict resolution. For example, Johnson and Johnson (1995a) conducted extensive research in support of the "peacemaker" approach, using whole-school or cadre methods, with programs for all grade

levels. Their controlled outcome studies (Johnson & Johnson, 1995b) demonstrated that students can learn and retain conflict resolution skills, and subsequently apply their skills to actual conflicts in both school and family settings. Their program reduced overall school problems and facilitated academic achievement.

There are many resources for additional information, including the National Institute for Dispute Resolution (202-466-4764; email [nidr@nidr.org](mailto:nidr@nidr.org)) and the New Mexico Center for Dispute Resolution (505-247-0571). The National Resource Center for Youth Mediation has extensive training materials (800-249-6884). The Juvenile Justice Clearinghouse (800-638-8736) provides a guide to conflict resolution education programs, [Conflict resolution education: A guide to implementing programs in schools, youth-serving organizations, and community and juvenile justice settings](#). Additional information is available from the Safe and Drug-Free Schools Program of the U.S. Department of Education (202-260-3954).

### Violence prevention counseling

Violence prevention counseling can help aggressive youth cope with their frustration and hostility, and resolve conflicts without fighting. For example, the Duke University "Coping Power" program developed by Lochman (1992) to teach aggressive youth to cope with their anger has been shown to help children correct distortions in their perceptions of social interactions and choose non-violent alternative courses of action. Hammond and colleagues have developed the Positive Adolescents Choices Training (PACT) program for work specifically with African-American youth (Hammond, 1991; Hammond & Yung, 1993). PACT uses culturally sensitive videotapes to teach youth social skills such as strategies for expressing and responding to criticism and negotiating solutions to disputes.

The Violence Prevention Curriculum for adolescents is part of the Teenage Health Teaching Modules (THTM) program. Developed by Deborah Prothrow-Stith, the curriculum lends itself to working in schools with anger management, family violence, media violence and dating violence. Teachers use handouts and videos to teach the program. Evidence of program effectiveness is available (Grossman et al., 1997).

Overall, there is considerable research in support of cognitive-behavioral approaches which not only reduce aggressive behavior, but in some studies also improve school attendance and grades, and reduce substance abuse (Bry, 1982; Izzo, & Ross, 1990; Lochman, 1992; Rotheram, 1982). Unfortunately, some briefer, but more popular approaches to violence prevention have not been well-supported. For information on the "Coping Power" program contact Dr. John Lochman (919-684-8732). For information on PACT, contact Research Press (217-352-3273). For information about a wide range of anger control and violence prevention programs, contact PAVNET (Partnerships Against Violence Network), which is a virtual library of reports and guidebooks from seven different Federal agencies (<http://www.pavnet.org/>).

## Bullying reduction

Bullying is a pervasive problem which is often overlooked or minimized in schools. Because bullying is so pervasive, it is sometimes regarded as a normal or inevitable part of growing up. On the contrary, research (Boulton & Underwood, 1992; Craig, 1998; Crick, 1998; Crick & Bigbee, 1998; Furlong, Chung, Bates, & Morrison, 1995; Gilmartin, 1987; Kochenderfer & Ladd, 1996; Neary & Joseph, 1994; Slee & Rigby, 1993) indicates that school victimization has substantial and lasting effects on children's social and emotional adjustment. In one study, approximately 3/4 of midwestern school children reported some episodes of bullying, with about 14 percent experiencing severe reactions to abuse (Hoover, Oliver, & Hazler, 1992). Repeatedly victimized children often experience a variety of mental health problems including depression, anxiety, and low self-esteem. Victims tend to feel unsafe at school and are more likely to have school attendance problems than other students. Victims of chronic bullying continue to exhibit social adjustment problems in adulthood. Young bullies develop attitudes and values which lead to more serious aggressive behavior in adolescence. Adult tolerance for bullying sends the wrong message to children and promotes acceptance of coercion, harassment, derogation, and violence as means of controlling others.

School-wide campaigns which condemn bullying and encourage more appropriate behavior can dramatically reduce bullying, and in turn lower the likelihood of later aggression and delinquency which often follows. Dan Olweus developed and tested a highly successful program used first in Norway and later in the United States and other countries. Olweus (1997) evaluated the effectiveness of this program in 42 primary and secondary schools in Norway. He found a 50% reduction in bully/victim problems, as well as marked reductions in vandalism, truancy, and fighting. For information on this bullying program, the book Bullying at School -- What We Know and What We Can Do can be ordered from Blackwell Press (800-216-2522).

There are numerous programs and guides for schools to conduct bullying reduction campaigns (National School Safety Center, 1999). For example, Bully-Proofing Your School (Garrity, 1994) is a prevention program designed to make the school environment physically and psychologically safer. Through staff training, student instruction, intervention with bullies, and collaboration with victims and parents, the program uses role-playing, modeling and class discussions to teach anger control and empathy, and strategies for victims. Another guide, Preventing Bullying: A Manual for Schools and Communities can be obtained from the U.S. Department of Education (1-877-433-7827 or [www.ed.gov/pubs/index.html](http://www.ed.gov/pubs/index.html)). A list of resources is available from the National School Safety Center (805-373-9977).

### Social competence development

Children as young as age 4 can be taught to solve interpersonal problems in an empathic and considerate manner. Social competence generally refers to the ability to get along with others and cope with problems effectively. There are several well-designed and rigorously evaluated programs which teach social competence (Greenberg, Kusche, Cook, & Quamma, 1995; Caplan, Weissberg, Grober, Sivo, Grady, & Jacoby, 1992). One of the best-known programs, Interpersonal Cognitive Problem Solving (ICPS, also known as "I Can Problem Solve") was developed by Myrna Shure and colleagues over the course of thirty-five years of research. This approach teaches children to identify problems, recognize the feelings and perspectives of others, consider the consequences of alternative solutions, and then choose the best course of action. There are inexpensive manuals and workbooks -- from preschool to grade 6 -- which can be used by either teachers or parents (Shure, 1992, 1996a, 1996b). Numerous evaluations, including multi-year follow-up studies, document that training improves children's behavior and generalizes across classroom, home, and peer situations (Shure, 1997). Children are less impulsive and disruptive, and more cooperative and prosocial with peers and adults. For ICPS materials, contact Research Press (217-352-3275).

The Primary Mental Health Prevention (PMHP) project is one of the oldest and most respected school-based programs for identifying and treating children at risk for emotional and behavioral problems (Cowen, et al., 1996). PMHP has changed and evolved over the course of nearly 40 years, with a basic model involving carefully supervised, paraprofessional counseling for children with emotional or behavioral problems. There are specialized components to teach social problem-solving, assist children with divorced parents, facilitate peer relationships and encourage cooperative learning (the "Study Buddy" program). A variety of large-scale, multi-year program evaluations involving thousands of students documented positive changes in the emotional and behavioral adjustment of PMHP children. PMHP has a well-established dissemination and training program; the model is now formally employed in California (180 school districts), Connecticut (23), New York (134), and Washington (34), with more than a dozen other states implementing similar programs in one or more school districts. Dr. Hightower directs the PMHP at the University of Rochester (716-273-5957).

## Drug education

Drug education programs typically involve school-based instruction about the negative effects of alcohol and drug use, accompanied by efforts to encourage responsible decision making. No prevention program is more popular, or more controversial, than Drug Abuse Resistance Education (D.A.R.E.). D.A.R.E. began in 1983 as a collaborative effort between the Los Angeles Police Department and the Los Angeles Unified School District and has been adopted in over 70% of the nation's school districts, as well as 44 foreign countries (Law Enforcement News, 1996). The original core curriculum was designed for uniformed police officers to teach a specific drug prevention curriculum to students in their last (5th or 6th) grade of elementary school. The core curriculum has been the subject of extensive research, although there are D.A.R.E. programs for other grade levels which have received much less attention.

In 1994, Ringwalt and colleagues (Ringwalt, Greene, Ennett, Iachan, Clayton, & Leukefeld, 1994) released an evaluation of the D.A.R.E. program based on a meta-analysis of eight methodologically rigorous studies. All eight studies assessed students before and after completion of the core D.A.R.E. curriculum and included control groups of students not receiving D.A.R.E.. Overall, the studies involved more than 9,300 students and 215 schools. The results indicated that D.A.R.E. was most effective at increasing knowledge about drug use and in improving social skills. There was a small improvement in attitudes toward police, attitudes about drug use, and self-esteem. Unfortunately, however, the effect size for reported drug and alcohol use was not statistically significant. These results helped generate a storm of criticism and often contentious debate concerning the merits of D.A.R.E.. Some researchers and reporters who presented unfavorable findings about D.A.R.E. effectiveness were the recipients of harsh criticism and even harassment (Glass, 1998; Rosenbaum & Hanson, 1998).

In defense of D.A.R.E., one limitation of most outcomes studies was that they examined drug and alcohol use shortly after completion of D.A.R.E., when students are 11 or 12 years old and the baseline rates of drug use are so low that the effects of D.A.R.E. might not be evident. To overcome this limitation, Rosenbaum and Hanson (1998) reported results of a six year longitudinal study of 1,798 students from 36 schools. This methodologically rigorous study employed randomized control groups and corrected for many statistical and methodological problems of previous studies. There were expectations that this study would salvage D.A.R.E.'s reputation and demonstrate conclusively that it was effective. Unfortunately, this study again found that D.A.R.E. did not reduce drug use, and in suburban schools, D.A.R.E. was associated with a 3-5% increase in drug use.

D.A.R.E. is an appealing, popular program which has fostered cooperation between education and law enforcement. It has many benefits for students, including increased knowledge about drugs and improved attitudes toward law enforcement. Nevertheless, the research evidence about D.A.R.E. effectiveness in reducing drug use has been weak and cannot be discounted (Gottfredson, 1997). To its credit, D.A.R.E. has made changes to its curriculum and focused more efforts on older students who are most likely to use drugs. Recently, D.A.R.E. advocates and critics have met to discuss constructive methods of improving D.A.R.E. and resolving some of the controversial question about D.A.R.E. effectiveness (William Modzeleski, personal communication, February 26, 1999).

Educators are well-advised not to fashion their own alternatives to D.A.R.E., since many non-D.A.R.E. drug education programs are either ineffective or worse, have the unintended effect of increasing drug use (Rosenbaum & Hanson, 1998).

There is, however, evidence that some drug education programs are effective. Interactive programs that emphasize interpersonal skills to counter peer pressure and use a participatory teaching approach are more effective than programs which rely on moral exhortation, fear arousal, or self-esteem building (Gottfredson, 1997; Ringwalt, Greene, Ennett, Iachan, Clayton, & Leukefeld, 1994).

Life Skills Training (Botvin & Eng, 1982; Botvin, Baker, Botvin et al., 1984; Botvin, Baker, Renick et al., 1984; Botvin, Batson et al., 1989) delivers a broad approach to social competency and skills development through 16 sessions for 7th grade students, with eight booster sessions in grades 8 and 9. Information on Life Skills Training can be obtained from the Institute of Preventative Research at Cornell Medical College (212-746-1270).

ALERT (Ellickson & Bell, 1990, Ellickson, Bell, & McGuigan, 1993) is another successful program with an emphasis on social resistance skills, and has been rigorously evaluated in 30 schools. Information on ALERT can be obtained from Project Alert, 725 South Figueroa Street, Suite 1615, Los Angeles, California 90017-5410 (1-800-253-7810, email [alertplus@aol.com](mailto:alertplus@aol.com), web address [www.projectalert.best.org](http://www.projectalert.best.org)).

## **Treatment of juvenile offenders**

In addition to the prevention programs described above, treatment of juvenile offenders constitutes one of the most cost-effective forms of prevention.

### Institutional treatment

Lipsey and Wilson (1997) examined 83 studies of institutional treatment for serious juvenile offenders and identified the kinds of treatment approaches which were most successful in reducing recidivism. How effective is institutional treatment? The average treatment program reduced reoffense rates by about 12% beyond the baseline reoffense rate for the institution as a whole (baseline rates vary by institution). This is probably sufficient to be a cost-effective and worthwhile reduction, when the expense and social impact of juvenile crime is considered. However, the most effective treatment programs reduced recidivism by 30 to 40%, which clearly represents a substantial benefit.

Using the statistical methods of meta-analysis, Lipsey & Wilson (1997) were able to identify the characteristics of the most effective programs. The most effective programs made extensive use of individual counseling and interpersonal skills training. Youth reviewed difficult social situations or past experiences, learned more skillful responses, and practiced their skills using methods such as role-playing, videotape feedback, and homework tasks. Young offenders also improved their ability to identify and cope with angry feelings. Examples of effective programs are Aggression Replacement Training (Glick & Goldstein, 1983; Goldstein, & Glick, 1994; Goldstein, Glick, Irwin, Pask-McCartney, & Rubama, 1989), the Social Interactional Skills Program (Shivrattan, 1988) and social-cognitive training (Guerra & Slaby, 1990).

Notably, some popular programs were not effective. There is little evidence to support the use of wilderness/challenge programs (Lipsey & Wilson, 1997). Boot camps (also called shock incarceration) are another very popular program which has had disappointing results (Cowles, Castellano, & Gransky, 1995; Cronin, 1994; Henggeler & Shoenwald, 1994; MacKenzie & Souryal, 1994). Although offenders sent to boot camps tend to develop less antisocial attitudes while at the camp, camps have little or no effect on recidivism after return to the community.

It is important to recognize that programs with novel or appealing qualities -- such as wilderness programs and boot camps -- often have little or no lasting impact on juvenile crime, and may prevent the implementation of more effective programs. Despite their political popularity and seemingly down-to-earth emphasis on self-discipline and personal responsibility, wilderness programs and boot camps do not deliver what they promise. However, some boot camps do have lower recidivism than others. The most effective boot camps are not the camps with the greatest emphasis on military discipline or physical training; instead, effectiveness is associated with intensity of aftercare and community supervision.

### Group homes

Lipsey and Wilson (1997) reported that effective community residential programs provide an array of services including group and individual counseling, educational support, and vocational

training. The most effective programs utilized a family home approach in which adult supervisors served as "teaching parents" working closely with a small number of youth. For example, Achievement Place (Kirigin, Braukmann, Atwater, & Worl, 1982; Levitt, Young, & Pappenfort, 1981; Wolf, Phillips, Fixsen, 1974) places six to eight youth with a couple who serve as surrogate parents and child advocates while administering a behaviorally oriented program. Youth can return to their own homes on weekends and remain in their local schools. Achievement Place group homes are now organized according to a more general Teaching-Family Model (Bernfeld, Blase, & Fixsen, 1990). Critical to the success of group homes is the training and experience of treatment personnel and their faithful adherence to effective treatment procedures.

### Noninstitutional treatment

Lipsey and Wilson (1997) synthesized the results of 117 studies of juvenile offenders treated outside of institutional settings. In general, noninstitutional treatments reduce recidivism to about half the rate that it would have been without treatment (Lipsey & Wilson, 1997). A wide variety of treatment approaches were effective, with individual counseling the most effective. Several types of counseling were beneficial, including reality therapy (Bean, 1988) and multisystemic therapy (Bourduin et al, 1990). Training programs emphasizing interpersonal skills, parent training, and behavioral contracts also are effective (see also Guerra, Tolan, & Hammond, 1994). Davidson and colleagues (Davidson et al., 1987, Davidson & Redner, 1988) has demonstrated that at least one form of diversion program for juveniles convicted of relatively minor offenses can prevent recidivism, although it must be noted that to be effective, diversion programs should be closely supervised, with clear goals, and specific interventions (Guerra, Tolan, & Hammond, 1994).

Despite some differences in treatment methods, the most effective programs had some common characteristics: greater length of treatment (generally more than the median of 25 weeks for all treatments), greater attention to treatment integrity (i.e., checks to make sure the therapists followed the treatment procedure), and use of mental health personnel rather than juvenile justice personnel to administer treatment. Multisystemic therapy is carefully described in a treatment manual (Henggeler, 1991; see also Henggeler & Bourdin, 1990), available from the Family Services Research Center for the Medical University of South Carolina (803-792-8003). Other effective treatments are described in the section on institutional treatment.

Intensive community supervision, also called Intensive Supervised Probation (ISP) is a widely used but controversial approach. ISP programs use a variety of methods to monitor offenders and increase their level of direct contact with probation officers. Early enthusiasm for ISP programs waned when careful research uncovered limitations and problems with the claims of ISP advocates. A scientifically rigorous, controlled study of 14 ISP programs in nine states (Petersilia & Turner, 1993) found that ISP participants overall had a rearrest rate no different from non-participants. Moreover, the average ISP probation violation rate was 65% compared to 38% for controls. The primary virtue of ISP appeared to be that increased monitoring led to increased detection of probation violations. Other studies have found mixed results for ISP, but the general consensus is that the *increased monitoring* of ISP does not reduce recidivism

(MacKenzie, 1997). However, there is evidence that *ISP does reduce recidivism if the program includes treatment services* beyond simple monitoring (MacKenzie, 1997; Petersilia & Turner, 1993). A recurrent theme apparent in the evaluation of many programs is that effective treatment is often linked to the delivery of high-quality services designed to improve social competencies, prevent substance abuse, and facilitate employment.

## **An Integrative Model**

### Communities That Care

Communities That Care (Hawkins, Catalano, & Associates, 1992) is a systematic, theoretically grounded approach to helping communities create conditions and relationships which protect youth against drug and alcohol abuse. The Communities That Care model describes how communities can plan, undertake, monitor, and evaluate a series of programs and strategies to reduce risk factors and strengthen protective factors in individual children, their families, schools, and neighborhoods. In addition to a core emphasis on substance abuse, this ambitious model is designed to improve family functioning, increase school achievement, and generally reduce antisocial and delinquent behavior. The evolving Communities That Care model is both comprehensive and flexible, and can be adapted to individual community needs and goals.

There is considerable outcome research in support of various components of the approach, e.g., parent education, teacher training, substance abuse prevention, social skills counseling, and others (Hawkins, Catalano, Morrison, O'Donnell, Abbott, Day, 1992; Hawkins, Jenson, Catalano, & Wells, 1991; O'Donnell, Hawkins, Catalano, Abbott, et al., 1995). Communities That Care has an extensive series of planning and training materials, as well as prepared curricula and audio and video materials which can be obtained from Developmental Research and Programs, Inc. 130 Nickerson, Suite 107, Seattle, Washington 98109 (800-736-2630).

### **What's next?**

We have made considerable progress in identifying what works in reducing youth violence. Nevertheless, there is substantial work to be done. Even the most effective programs can be improved. A 50% reduction in juvenile crime is a remarkable accomplishment, but not an ultimate goal.

Moreover, we need better means of assuring that programs are accurately disseminated and faithfully implemented in order for them to be effective (Henggeler, Melton, Brondino, Scherer, & Hanley, 1997). The best-validated, proven programs will fail if staff are not ready and able to carry them out according to their established procedures. Workshops and conferences make good introductions, but they are not sufficient training to assure programs function as intended.

Next, it is important to recognize that youth at-risk to engage in violent behavior are not a homogeneous group. We need better means of matching youth to the programs which are most

effective in addressing their problems and concerns. This means improved identification and assessment methods, as well as a better understanding of the differential effects of different programs.

Finally, the criteria for program success or effectiveness require careful consideration and ongoing evaluation. The most obvious sign of program success is a reduction in juvenile crime, but there are other important goals as well, for example, educational achievement and gainful employment. There are many ways to define and measure desirable outcomes for individuals, institutions, and communities as a whole. The complex relationship among these outcomes remains to be specified. Ultimately, it will be most useful to identify those outcomes or goals for young children and their families which best facilitate and make possible the attainment of future success -- however defined -- as those children pass through adolescence to adulthood.

## Acknowledgements

April 27, 1999. This is a working paper subject to ongoing revision. Suggestions are welcome. We regret that we could not include all programs with well-documented evidence of their effectiveness.

Our report was prepared in order to assist Virginia schools and communities in assessing program and training needs concerning youth violence and gangs. This effort is being furthered by the Youth Gang Project in Virginia, a project funded by the Virginia General Assembly through a university consortium consisting of the Virginia Youth Violence Project of the University of Virginia and the Center for School-Community Collaboration of Virginia Commonwealth University.

Dewey Cornell directs the Virginia Youth Violence Project at the University of Virginia. Ann Loper is Associate Director for Research and Peter Sheras is Associate Director for Training and Education. Virginia Youth Violence Project staff who contributed to the Youth Gang Project include graduate students Karen Brockenbrough, Stan Hannah, Mark Hiatt, Tricia Marsh, Lela McKnight, Dan Murrie, Jared VonArx, Heather West, Jennifer Whitney, and Wai Wong.

For additional information, contact the Virginia Youth Violence Project:

email: youthvio@virginia.edu  
web site: <http://curry.edschool.virginia.edu/go/youthvio/>  
office phone: 804-924-8929  
fax: 804-924-1433  
postal address: Virginia Youth Violence Project  
405 Emmet Street  
Curry School of Education, University of Virginia  
Charlottesville, VA 22903-2495

## REFERENCES

- Alexander, J. F., & Parsons, B. V. (1982). Functional family therapy. Monterey, CA: Brooks/Cole.
- American Psychological Association. Violence on television. Washington, D.C.: Author Retrieved May 14, 1997 from the World Wide Web:<http://www.apa.org/pubinfo/violence.html>
- Banks, L., Marlene, H., Reid, J., Patterson, G., & Weinrott, M. (1991). A comparative evaluation of parent-training interventions for families of chronic delinquents. Journal of Abnormal Child Psychology, 19, 15-31.
- Barkley, R. A. (1997). Defiant children: A clinician's manual for assessment and parent training. New York: The Guilford Press.
- Bean, J. S. (1988). The effect of individualized reality therapy on the recidivism rates and locus of control orientation of male juvenile offenders. Unpublished doctoral dissertation, University of Mississippi.
- Bernfeld, G. A., Blase, K. A., & Fixsen, D. L. (1990). Towards a unified perspective on human service delivery systems: Application of the teaching-family model. In R. J. McMahon, R. DeV. Peters (Eds.) Behavior disorders of adolescence: Research, intervention, and policy in clinical and school settings (pp. 191-205). NY: Plenum Press.
- Berreuta-Clement, J. R., Schweinhart, L. J., Barnett, W. S., Epstein, A. S., & Weikart, D. P. (1985). Changed lives: The effects of the Perry Preschool Program on youths through age 19. Ypsilanti, MI: High Scope Press.
- Bourque, B.B., Han, M., & Hill, S.M. (1996). A national survey of aftercare provisions for boot camp graduates. Washington, D.C.: National Institute of Justice, Office of Justice Programs, U.S. Department of Justice.
- Botvin, G. J., Baker, E., Botvin, E. M., Filazzola, A. D., & Millman, R. B. (1984). Prevention of alcohol misuse through the development of personal and social competence: A pilot study. Journal of Studies on Alcohol, 550-552.
- Botvin, G. J., Baker, E., Renick, N. L., Filazzola, A. D., & Botvin, E. M. (1984). A cognitive behavioral approach to substance abuse prevention. Addictive Behaviors 9, 137-147.
- Boulton, M.J. & Underwood, K. (1992). Bully/victim problems among middle-school children. British Journal of Educational Psychology, 62, 73-87
- Brestan, E. V. & Eyberg, S. M. (1998). Effective psychosocial treatments of conduct-disordered children and adolescents: 29 Years, 82 Studies, and 5272 Kids. Journal of Clinical Child Psychology, 27, 180-189.
- Bry, B. H. (1982). Reducing the incidence of adolescent problems through preventive intervention: One- and five-year follow-up. American Journal of Community Psychology, 10, 265-276.
- Bureau of Justice Assistance. (1995). Boys & Girls (B&G) Clubs of America. Bureau of Justice Assistance Fact Sheet. Washington, DC: U.S. Department of Justice.
- Bureau of Justice Assistance. (1997). Urban street gang enforcement. Washington, D.C.: Author.
- Caplan, M., Weissberg, R. P., Grober, J. S., Sivo, P. J., Grady, K., and Jacoby, C. (1992). Social competence promotion with inner-city and suburban young adolescents: Effects on social adjustment and alcohol use. Journal of Consulting and Clinical Psychology, 60, 56-63.
- Cedar, B., & Levant, R.F., (1990). A meta-analysis of the effects of parent effectiveness training. The American Journal of Family Therapy, 18, 373-383.

Conduct Problems Prevention Research Group. (1992). A developmental and clinical mode for the prevention of conduct disorder: The FAST Track Program. Development and Psychopathology, 4, 509 - 527.

Cowen, E. L., Hightower, A. D., Pedro-Carroll, J. L., Work, W. C., Wyman, P. A., with Haffey, W. G. (1996). School-based prevention for children at risk: The Primary Mental Health Project. Washington, D.C.: American Psychological Association.

Cowles, Castellano, & Gransky, (1995). "Boot camp" drug treatment and aftercare interventions: An evaluation review. Washington, D.C.: National Institute of Justice, Office of Justice Programs, U.S. Department of Justice.

Craig, W.M. (1998). The relationship among bullying, victimization, depression, anxiety and aggression in elementary school children. Personality and Individual Differences, 24, 123-130.

Crick, N.R., & Bigbee, M.A. (1998). Relational and overt forms of peer victimization: A multi-informant approach. Journal of Consulting and Clinical Psychology, 66, 337-347.

Cronin, R. C. (1994). Boot camps for adult and juvenile offenders: Overview and update. Washington, D.C.: National Institute of Justice.

Davidson, W. S. II, & Redner, R. (1988). The prevention of juvenile delinquency: Diversion from the juvenile justice system. In R. H. Price, E. L. Cowen, R. P. Lorion, & J. Ramos-McKay (Eds.), 14 ounces of prevention: A casebook for practitioners (pp. 123-137). Washington, D. C.: American Psychological Association.

Davidson, W. S. II, Redner, R., Blakely, C. H., Mitchell, C. M., & Emshoff, J. G. (1987). Diversion of juvenile offenders: An experimental comparison. Journal of Consulting and Clinical Psychology, 55, 68-75.  
Donnerstein, Edward; Slaby, Ronald G.; Eron, Leonard D. (1994). The mass media and youth aggression. In L.D. Eron, & J.H. Gentry (Eds.) Reason to hope: A psychosocial perspective on violence & youth (pp.219-250.) Washington, D.C. : American Psychological Association.

Ellickson, P. L., & Bell, R. M. (1990). Drug prevention in junior high: A multi-site longitudinal test. Science 247, 1299-1305.

Ellickson, P. L., Bell, R. M., & McGuigan, K. (1993). Preventing adolescent drug use: Long-term results of a junior high program. American Journal of Public Health 83, 856-861.

Eron, L. D., Gentry, J. H., & Schlegel, P. (Eds.). (1994). Reason to hope: A psychological perspective on violence and youth. Washington DC: American Psychological Association.

Family Services Research Center (1995). Multisystemic therapy using home-based services: A clinically effective and cost effective strategy for treating serious clinical problems in youth. Charleston, S.C.: Author.

Felner, R. D., & Adan, A. M. (1988). The school transitional environment project: An ecological intervention and evaluation. In R. H. Price, E. L. Cowen, R. P. Lorion, and J. Ramos-McKay (eds.), 14 ounces of prevention: A casebook for practitioners. Washington, D.C.: American Psychological Association.

Felner, R. D., Ginter, M., and Primavera, J. (1982). Primary prevention during school transitions: Social support and environmental structure. American Journal of Community Psychology 10, 277-290.

Freedman, M. (1993). The kindness of strangers. San Fransisco, CA: Josey-Bass Publishers.

Furlong, M.J., Chung, A., Bates, M., & Morrison, R. L. (1995). Who are the victims of school violence? A comparison of student non-victims and multi-victims. Education and Treatment of Children, 18, 282-298.

Garrity, C., Jens, K., Parter, W., Sager, N., & Short-Camilli, C. (1994). Bully-Proofing your school: A comprehensive approach for elementary schools. Longmont, Co: Sopris Press.

Gilmartin, B.G. (1987). Peer group antecedents of severe love-shyness in males. Journal of Personality, 55 467-489.

Glass, S. (1998). Truth and D.A.R.E.: The nation's most prestigious drug prevention program for kids is a failure. Why don't you know this? Rolling Stone 42-43. March 5.

Glick B. & Goldstein, A. P. (1983) Aggression replacement training. Journal of Counseling and Development, 65, 356-362.

Goldstein, A. P., Glick, B., Irwin, M. J., Pask-McCartney, C., & Rubama, I. (1989). Reducing delinquency: Intervention in the community. New York: Pergamon Press.

Goldstein, A. P., & Glick, B. (1994). Aggression replacement training. Simulation & Gaming, 25, 90-26.

Greenberg, M. T., Kusche, C. A., Cook, E. T., and Quamma, J. P. (1995). Promoting emotional competence in school-aged children: The effects of the PATHS curriculum. Development and Psychopathology, 7, 117-136.

Greenwood, P. W., Model, K. E., Rydell, C. P., Chiesa, J. R. (1998). Diverting Children from a Life of Crime: Measuring Costs and Benefits (Document No. MR-699-1-UCB/RC/IF). Santa Monica, CA.

Grossman, J. B., & Garry, E. M. (1997). Mentoring -- A proven delinquency prevention strategy. Juvenile justice Bulletin. Washington, DC: U.S. Department of Justice.

Grossman, Neckerman, Koepsell, Liu, Asher, Beland, Frey & Rivara. (1997). The effectiveness of a violence prevention curriculum among children in elementary school. Journal of the American Medical Association, May 27, 1997.

Guerra, N. G., & Slaby, R. G. (1990). Cognitive mediators of aggression in adolescent offenders: 2. Intervention. Developmental Psychology, 26, 269-277.

Guerra, N. G. Tolan, P. H., & Hammond, W. R. (1994). Prevention and treatment of adolescent violence. In L.D. Eron, J. H. Gentry, & P. Schlegel (Eds.) Reason to hope: A psychosocial perspective on violence & youth (pp. 383-403). Washington, D.C.: American Psychological Association.

Hammond, R. (1991). Dealing with anger: Givin' it, Takin' it. Workin' it out. Champaign, IL: Research Press.

Hammond, R., & Yung, B. (1993). Evaluation and activity report: Positive adolescent choices training. Unpublished grant report. U.S. Maternal and child Health Bureau, Washington, D.C.

Hawkins, J. D., Arthur, M. W., & Catalano, R. F. (1995). Preventing substance abuse. In Michael Tonry and David P. Farrington (Eds.), Building a safer society. Crime and justice, Vol. 19. Chicago: University of Chicago Press.

Hawkins, J. D., Catalano, R. F., & Associates. (1992). Communities that care: Action for drug abuse prevention. San Francisco: Jossey-Bass Publishers.

Hawkins, J. D., Catalano, R. F., Morrison, D. M., O'Donnell, J., Abbott, R. D., Day, L. E. (1992). The Seattle Social Development Project: Effects of the first four years on protective factors and problem behaviors. In J. McCord & R. E. Tremblay (Eds.), Preventing antisocial behavior: Interventions from birth through adolescence. New York: Guilford.

Hawkins, J. D., Doueck, H. J., and Lishner, D. M. (1988). Changing teaching practices in mainstream classrooms to improve bonding and behavior of low achievers. American Educational Research Journal 25, 31-50.

Hawkins, J. D., Jenson, J. M., Catalano, R. F., & Wells, E. A. (1991). Effects of a skills training intervention with juvenile delinquents. Research on Social Work Practice, 1, 107-121.

- Henggeler, S. W. (1991). Treating conduct problems in children and adolescents (treatment manual). Columbia, SC: S.C. Dept. of Mental Health.
- Henggeler, S., W., & Borduin C. M. (1990). Family therapy and beyond: A multisystemic approach to treating behavior problems of children and adolescents. Pacific Grove, CA: Brooks/Cole.
- Henggeler, S. W., Melton, G. B., Smith, L. A., Schoenwald, S. K., & Hanley, J. H. (1993). Family preservation using multisystemic treatment: Long-term follow-up to a clinical trial with serious juvenile offenders. Journal of Child and Family Studies, 2, 283-293.
- Henggeler, S. W., & Shoenwald, S. K. (1994). Boot camps for juvenile offenders: Just say no. Journal of Child and Family Studies, 3, 243-248.
- Henggeler, S. W., Melton, G. B., Brondino, M. J., Scherer, D. G., & Hanley, J. H. (1997). Multisystemic therapy with violent and chronic juvenile offenders and their families: The role of treatment fidelity in successful dissemination. Journal of Consulting and Clinical Psychology, 65, 821-833.
- Hoover, J., Oliver, R., & Hazler, R.J. (1992) Bullying: Perceptions of adolescent victims in the Midwestern U.S.A. School Psychology International, 13, 5-16.
- Hughes, J.N. & Hasbrouck, J.E. (1996). Television violence: Implications for violence prevention. School Psychology Review, 25 134-151.
- Izzo, R. L., & Ross, R. R. (1990). Meta-analysis of rehabilitation programs for juvenile delinquents. Criminal Justice and Behavior, 17, 134-142.
- Johnson, D. W., & Johnson, R. T. (1995a). Teaching students to be peacemakers (3rd ed.) Edina, MN: Interaction Book.
- Johnson, D. W., & Johnson, R. T. (1995b). Teaching students to be peacemakers: Results of five years of research. Peace and Conflict: Journal of Peace Psychology, 4, 417-438.
- Jones, M. B. & Offord, D.R. (1989). Reduction of anti-social behavior in poor children by nonschool skill development. Journal of Child Psychology and Psychiatry and Allied Disciplines, 30, 737-750.
- Karoly, L. A., Greenwood, S. M., Everingham, J. H., Kilburn, M. R., Rydell, C. P., Sanders, M. R., Chiesa, J. R. (1998). Investing in Our Children: What We Know and Don't Know About the Cost and Benefits of Early Childhood Interventions (Document No. MR-898-TCWF). Santa Monica, CA.
- Kazdin, A. (1997). Parent management training: Evidence, outcomes, and issues. Journal of the American Academy of Child and Adolescent Psychiatry, 36, 1349-1358.
- Kazdin, A.E., T.C. Siegel, & D. Bass (1992). Cognitive problem-solving skills training and parent management training in the treatment of anti-social behavior in children. Journal of Consulting and Clinical Psychology 60, 733-747.
- Kennedy, D. M., Piehl, A. M., & Braga, A. A. (1996). Youth Gun Violence in Boston: Gun Markets, Serious Youth Offenders, and a Use Reduction Strategy.
- Kirigin, K. A., Braukmann, C. J., Atwater, J. D., & Worl, M. M. (1982). An evaluation of teaching-family (Achievement Place) group homes for juvenile offenders. Journal of Applied Behavior Analysis, 15, 1-16.
- Klein, M. W. (1995). The American street gang: Its nature, prevalence, and control. NY: Oxford Univ. Press.

- Klein, N. C., Alexander, J. F., & Parsons, B. V. (1977). Impact of family systems intervention on recidivism and sibling delinquency: A model of primary prevention and program evaluation. Journal of Consulting and Clinical Psychology, *45*, 469-474.
- Kochenderfer, B.J., & Ladd, G.W. (1996). Peer victimization: Cause or consequence of school maladjustment? Child Development, *67*, 1305-1317.
- Lally, J. R., Mangione, P. L., & Honig, A. S. (1988). The Syracuse University Family Development Research Project: Long-range impact of an early intervention with low-income children and their families. In D. R. Powell, Ed., Annual Advances in Applied Developmental Psychology, Vol. 3: Parent Education as Early Childhood Intervention: Emerging Directions in Theory, Research, and Practice. Norwood, NJ: Ablex.
- Landreth, G.L. & Lobaugh, A.F. (1998). Filial therapy with incarcerated fathers: Effects on parental acceptance of child, parental stress, and child adjustment. Journal of Counseling and Development, *76*, 157-165.
- Law Enforcement News. (1996). When it comes to the young, anti-drug efforts are going to pot. Law Enforcement News, *22*, 441-447.
- Levitt, J. J., Young, T. M., & Pappenfort, D. M. (1981). Achievement place: The teaching-family treatment model in a group-home setting. Washington, D.C.: U. S. Department of Justice.
- Lipsey, M. W., & Wilson, D. B. (1997). Effective intervention for serious juvenile offenders: A synthesis of research. Vanderbilt Institute for Public Policy Studies. Nashville, TN.
- Lochman, J. E. (1992). Cognitive-behavioral intervention with aggressive boys: Three-year follow-up and preventive effects. Journal of Consulting and Clinical Psychology, *60*, 426-432.
- MacKenzie, J. Eck, P. Reuter, & S. Bushway (Eds.) Preventing crime: What works, what doesn't, what's promising: A report to the United States Congress (Chapter 9). Washington, D.C.: National Institute of Justice.
- MacKenzie, D. L., & Souryal, C. (1994). Multisite evaluation of shock incarceration. Washington, D.C.: National Institute of Justice.
- Mayer, G. R., Butterworth, T. W., Nafpaktitis, M., and Sulzer-Azaroff, B. (1983). Preventing school vandalism and improving discipline: A three-year study. Journal of Applied Behavior Analysis *16*, 355-369.
- McDonald, L. Billingham, S. Conrad, T., Morgran, A. et al. (1997). Families and Schools Together (FAST). Families in Society, *78*, 140-155.
- Morgran, J.R., Nu'Man-Sheppard, J., & Allin, D.W., (1990). Prevention through parent training: Three preventive parent education programs. Journal of Primary Prevention, *10*, 321-333.
- Morrow, K.V., & Styles, M. B. (1995). Building relationships with youth in program settings: A study of Big Brothers/Big Sisters. Philadelphia: Public/Private Ventures
- National School Safety Center (1999, March). Bullying: Peer abuse in schools. School Safety Update 1-7.
- Neary, A., & Joseph, S. (1994). Peer victimization and its relationship to self-concept and depression among schoolchildren. Personality and Individual Differences, *16*, 183-196.
- O'Donnell, J., Hawkins, J. D., Catalano, R. F., Abbott, R. D. et al. (1995). Preventing school failure, drug use, and delinquency among low-income children: Long-term intervention in elementary schools. American Journal of Orthopsychiatry, *65*, 87-100.

Olweus, D. (1997). Tackling peer victimization with a school-based intervention program. In Fry, D. & Bjoerkqvist, K., Eds. Cultural variation in conflict resolution: Alternatives to violence. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Olweus, D. (1997). Bully/victim problems in school: Knowledge base and an effective intervention program. The Irish Journal of Psychology, 18, 170-190.

Patterson, G. R. , Reid, J. B., & Dishion, T. J. (1992). Antisocial boys: A social interactional approach. Eugene, Oregon: Castalia.

Peters, M., Thomas, D., & Zamberlan, C. (1997). Boot camps for juvenile offenders. Washington D.C.: National Institute of Justice, Office of Justice Programs, U.S. Department of Justice.

Ringwalt, C., Greene, J., Ennett, S., Iachan, R., Clayton, R. R., and Leukefeld, C. G. (1994). Past and Future Directions of the DARE Program: An Evaluation Review: Draft Final Report (Award # 91-DD-CX-K053). Washington, D.C.: National Institute of Justice.

Rosenbaum, D. & Hanson, G. (1998). Assessing the effects of school-based drug education: a six-year multi-level analysis of project DARE. Unpublished manuscript. Department of Criminal Justice and Center for Research in Law and Justice, U of Illinois at Chicago.

Rotheram, M. J. (1982). Social skills training with underachievers, disruptive, and exceptional children. Psychology in the Schools, 19, 532-539.

Schinke, S. P., Orlandi, M. A. & Cole, K. C. (1992). Boys & Girls Clubs in public housing developments: Prevention services for youth at risk. Journal of Community Psychology: OSAP Special Issue, 118-128.

Sheppard, D. (1999). Strategies to reduce gun violence. OJJDP fact Sheet, (No.93) Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Sherman, L. W., Gottfredson, D., MacKenzie, D., Eck, J., Reuter, P., Bushway, S., (1997). Preventing crime: What works, what doesn't, what's promising: A report to the United States Congress. Washington, D.C.: National Institute of Justice. (Download at <http://www.ncjrs.org/works/>)

Shure, M. B. (1992). I can problem solve (ICPS): An interpersonal cognitive problem solving program. Champaign, IL: Research Press.

Shure, M. B. (1996a). Raising a thinking child: Help your young child to resolve everyday conflicts and get along with others. New York: Pocket Books.

Shure, M. B. (1996b). Raising a thinking child workbook. New York: Henry Holt.

Shure, M. B. (1997). Interpersonal cognitive problem solving: Primary prevention of early high-risk behaviors in the preschool and primary years. In G. W. Albee & T. P. Gullota (Eds.), Primary prevention works (pp. 167-190). Thousand Oaks, CA: Sage.

Slee, P.T., & Rigby, K. (1992). Australian school children's self appraisal of interpersonal relations: The bullying experience. Child Psychiatry and Human Development.

Snyder, H. N., Sickmund, M., & Poe-Yamagata, E. (1997). Juvenile offenders and victims: 1997 update on violence. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

St. Pierre, T.L., Mark, M.M. Kaltreider, D.L., Aikin, K.J. (1997). Involving parents of high-risk youth in drug prevention: A three-year longitudinal study in Boys & Girls Clubs. Journal of Early Adolescence, 17, 21-50

- Tierney, J. P. Grossman, J. B. (1995). Making a difference: An impact study of Big Brothers/Big Sisters. Philadelphia, PA: Public/Private Ventures.
- Tremblay, R. & Craig, W. (1995). Developmental crime prevention. In Michael Tony and David P. Farrington (Eds.), Building a safer society. Crime and justice, Vol. 19. Chicago: University of Chicago Press.
- Tremblay, R.E., Kurtz, L., Masse, L.C., Vitaro, F. & Pihl, R. O. (1994). A bimodal preventive intervention for disruptive kindergarten boys: its impact through mid-adolescence. Unpublished manuscript. Montreal: University of Montreal Research Unit on Children's Psycho-Social Maladjustment.
- Tremblay, R.E., Pagani-Kurtz, L., Vitaro, F., Masse, L.C., & Pihl, R.O. (1995). A bimodal preventive intervention for disruptive kindergarten boys: Its impact through mid-adolescence. Journal of Consulting and Clinical Psychology, 63, 560-568.
- Webster-Stratton, C. (1998). Preventing conduct problems in Head Start children: Strengthening parenting competencies. Journal of Consulting and Clinical Psychology, 66, 715-730.
- Webster-Stratton, C. (1992). Individually administered videotape parent training: Who Benefits? Cognitive Therapy & Research, 16, 31-51.
- Webster-Stratton, C. (1982). The long-term effects of a videotape modeling parent-training program: Comparison of immediate and 1-year follow-up results. Behavior Therapy, 13, 702-714.
- Webster-Stratton, C. & Hammond, M. (1997). Treating children with early-onset conduct problems: A comparison of child and parent training interventions. Journal of Consulting and Clinical Psychology, 65, 93-109.
- Wolf, M. M., Phillips, E. L., Fixson, D. L. (1974). Achievement Place: Phase II (Vol I). Rockville, MD: Center for Studies of Crime and Delinquency, National Institute of Mental Health.
- Yoshikawa, H. (1994). Prevention as cumulative protection: Effects of early family support and education on chronic delinquency and its risks. Psychological Bulletin, 115, 28-54.