# 1. School-Owned and/ or Based Support Programs

*a.* *Are school-based mental health services effective? Evidence from 36 inner city schools:* An urban-based, university-affiliated children's psychiatric outpatient clinic implemented a program providing mental health services in inner city schools. A clinic sample was compared with a sample served in the schools. The findings show both sets of children improving -- as indicated by the Children's Global Assessment Scale and Global Assessment of Functioning Scale. Improvements were comparable, even though the school children were seen for a slightly shorter period of time (an average of 5 versus 8 months -- but with an equal frequency level of services -- 3 sessions per month in each setting). School personnel report that those receiving school-based services have improved in overall functioning, academic performance, attendance, and behavior.

> *For more information, see:*
> Armbruster, P., & Lichtman, J. Are school-based mental health services effective? Evidence from 36 inner city schools. *Community Mental Health Journal, in press.*

*b.* *California's Healthy Start:* This initiative is designed to involve schools, families, neighborhoods, and public and private agencies and businesses in working together to meet student and family needs. The evaluation of 65 sites from 1992 to 1995 showed better grades for students in grades K-3; improved attendance in grades K-3, especially for students absent most often; school-wide increases in standardized test scores in reading and math increased by 3% after 2 years of involvement; decrease in student mobility by 12%; increased parent involvement in school; decrease in reported need for child care, food clothing, and emergency funds; better family access to health and dental care; decreases in use of emergency room care for illness or injury; improved mental health. Employment increases ranged from 3% to 7% for high school age and older. Data collected in 1997 showed academic results from students most in need had increased appreciably. Test scores for schools in the lowest quartile improved substantially with reading scores for the lowest performing elementary schools increasing by 25% and math scores by 50%. Individual students in the lowest quartile showed similar improvement. Middle and High school students who were most in need improved their GPA's by almost 50% from .8 to 1.2. A dramatic reduction in suspensions among students with prior discipline problemsalso is reported. Students' health issues, especially preventive care, are being addressed where they had been ignored before. Parent's ability to rear their children improved by a 17% increase. Parental substance abuse decreased 12%. Students receiving Healthy Start services also are reported as decreasing their drug use, improving their self-esteem and increasing their perception of support from parents, classmates, teachers, and friends. Family violence is reported as decreasing; cases of domestic violence decreased by more than 50%. Parents are found to have greater awareness of the different stages of a child's developments and the different needs that correspond to these stages.

> *For more information, see:*
> *Healthy Start Works.* A Statewide Profile of Healthy Start Sites. California Department of Education, Healthy Start and After School Partnerships Office, March 1999. Contact (916) 657-3558.
>
> *Healthy Start Works.* Newsmagazine, Spring 1999. Healthy Start Field Office, UCD-Educ. / CRESS Center, Davis, CA 95616-8729. ID# 879Y. (530) 754-6343 or (530) 752-1277.
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> *California's Healthy Start: Strong Families, Strong Communities for Student Success.* By Rachel D. Lodge. Produced by the Healthy Start Field Office, University of California, Davis, under contract with the California Department of Education. 1998. To request copy call (530) 754-6343.
>
> *For program information, contact:*
> Lisa Villarreal, Healthy Start, EDUC-CRESS Center, UC Davis, Davis CA 95616, (530) 752-1277 / (530) 752-3754 (fax), lrvillarreal@ucdavis.edu.

c.    *School-Based Health Centers(SBHCs)*
      The movement to establish SBHCs reports over 1100 sites (most of which are school-based).  Below are a few
      indicators of their impact.

   c-1    *Oregon School Based Health Centers:* These centers offer students access to general medical
          services, reproductive health services, mental and emotional health services, and health promotion. Of
          3,667 students, almost 50% used a SBHC at least once. Ninety-percent of those who had used it reported
          trusting the clinic staff and agreed that the SBHC made access to health care easier. Twelve-percent had no
          other place to go for health care. Compared to those who used outside health care providers, users of
          SBHCs had higher percentages of risk indicators, although only differences in emotional health indicators
          reached significance. Three times as many sexually-active students sought care from outside providers as
          from SBHCs. One of the three program schools -- the one with the most community support and most
          comprehensive program -- showed that students decreased in substance abuse, improved reproductive
          health attitudes and reduced sexual activity more between baseline and follow-up measures than did those
          in the control school. In schools with SBHCs, more students had received complete immunization; care for
          emotional, personal or substance abuse problems; care for sexually transmitted diseases; and reproductive
          health services.

               *For more information, see:*
               Stout, J.W., White, L.C., Alexander, T. *Oregon School-Based Health Centers: A Follow-up Report.* Portland,
               Oregon: Oregon Health Division, Department of Human Resources, 1996.

               *For program information, contact:*
               School Based Health Centers, Technical Assistance Office, Oregon Health Division, 800 NE Oregon St., #21,
               Suite 825, Portland, OR 97232. (503) 731-4021 / fax: (503) 731-4083.

               *For evaluation information, contact:*
               Tammy Alexander, Adolescent Health Coordinator, Oregon Department of Human Resources, Oregon Health
               Division, 800 NE Oregon St., #21, Suite 825, Portland, OR 97232. (503) 731-4021 / fax: (503) 731-4083.

   c-2    *Multnomah County, Oregon, School Based Health Centers (SBHC):* These centers provide
          treatment for minor illnesses and injuries, routine physical exams, immunizations, health promotion
          programs, crisis and mental health counseling, and reproductive health services.  Compared to non-users,
          students who used a SBHC had more financial need for services and reported more health problems and
          risk behaviors. Nearly 80% of sexually active students who reported seeking reproductive health services
          used a SBHC.

               *For more information, see:*
               Daniels, J.A. *1994-95 School Based Health Centers: Annual Report.* Portland, Oregon: Multnomah County
               Health Department, 1996.

               *For program information, contact:*
               Jill A. Daniels, CHN, School Based Health Centers Program, Multnomah County Health Department, 426 SW
               Stark, 160/9, Portland, OR 97204. (503) 248-3674 / fax: (503) 306-5847.

               *For evaluation information, contact:*
               Dr. Barbara Glick, Principal Investigator, Program Design and Evaluation Services, Multnomah County Health
               Department, School Based Health Centers, 426 SW Stark, Eight floor, Portland, OR 97204. (503) 248-3663, ext.
               28271.

   c-3    *San Fernando High School*: At San Fernando High School (California), school-based clinic users were
          half (9%) as likely to drop out of school as nonusers (18%).  Students who enrolled in the school clinic
          were twice as likely to stay in school (44% versus 29%) and more likely to be promoted to the next grade
          (31% versus 20%) than non-registered students. The more visits the students made to the clinic, the higher
          the rates.  Students who were graduated or promoted averaged eight clinic visits compared with three visits
          made by students who were retained.

               *For more information, see:*
               Bureau of Primary Health Care: *School-Based Clinics that Work.* Washington, DC: Division of Special
               Populations, Health Resources and Services Administration, HRSA 93-248P, 1993.

c-4 *Three California SBHCs: A cost-benefit analysis*: A cost-benefit analysis of three California school-based clinics compared the costs of maintaining school services with estimated costs in the absence of the school clinic. Variables used included reduced emergency department use, pregnancies avoided, early pregnancy detection and treatment of chlamydia (a prevalent sexually transmitted disease). The ratios of savings to costs ranged from $1.38 to $2.00 in savings per $1.00 costs, suggesting that the school clinic services were a good investment for the health system.

> *For more information, see:*
> Brindis, C., Starbuck-Morales, S., Wolf, A.L., McCarter, V. *Annual Report to the Carnegie Corporation of New York and the Stuart Foundations July 1, 1991-June 3, 1992.* San Francisco: Institute for Health Policy Studies, University of California, 1993.
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> Dryfoos, J.G., Brindis, C., & Kaplan, D.W. Research and Evaluation in School-Based Health Care. *Adolescent Medicine: State of the Art Reviews.* Vol. 7, No. 2, June 1996. Philadelphia: Hanley & Belfus.

c-5 *School-Based Health Programs in Florida:* Only 10% of elementary students and 18% of high school students were reported as unable to return to class after being seen -- much lower rates than in routine school nursing practices. The presence of a clinic where students can obtain prescriptions for contraceptives at Glades Central High School in Park Beach, Florida, dramatically influenced a drop in teen pregnancy by 73%. At the school, a family practice physician is available three days a week. The Full Service School Coordinator of Northeast High School reported the school won an attendance award for the greatest percentage improvement following the addition of health services to the school site.

> *For more information, see:*
> Emihovich, C., Herrington, C.D. *Florida's Supplemental School Health Services Projects: An Evaluation.* Tallahassee: Florida State University, 1993.
>
> Dryfoos, J.G., Brindis, C., & Kaplan, D.W. Research and Evaluation in School-Based Health Care. *Adolescent Medicine: State of the Art Reviews.* Vol. 7, No. 2, June 1996. Philadelphia: Hanley & Belfus, Inc.
>
> Institute for At-Risk Infants, Children and youth, and their Families: *The effect of putting health services on site, Example 1. A Full Services School Assembly*, Tallahassee, Florida Department of Education, Office of Interagency Affairs, 1994.

c-6 *Teen Health Centers in Michigan:* A survey of 500 teens who attended a *Teen Health Center* indicated that 21% of respondents indicated they would not have received health care if the Center did not exist. The main reasons given were lack of transportation and no family physician. Thirty-eight percent reported learning of new health problems during the visit, including cancer symptoms, penicillin allergy, ear trouble, and high cholesterol. Sixty-five percent indicated their behavior had changed as a result of the contacts.

> *For more information, see:*
> Dryfoos, J.G., Brindis, C., & Kaplan, D.W. 1996. Research and Evaluation in School-Based Health Care. Adolescent Medicine: State of the Art Reviews, Vol. 7, No.2, June 1996.

c-7 *Lincoln High School in Denver:* This school offers students who commit a drug offense, a treatment contract for seven sessions at the school-based clinic rather than suspension. This component has resulted in an 80% reduction in suspensions.

> *For more information, see:*
> Bureau of Primary Health Care: *School-Based Clinics that Work.* Washington, DC: Division of Special Populations, Health Resources and Services Administration, HRSA 93-248P, 1993.
>
> Dryfoos, J.G., Brindis, C., & Kaplan, D.W. 1996. Research and Evaluation in School-Based Health Care. *Adolescent Medicine: State of the Art Reviews,* Vol. 7, No.2, June 1996.

d. *The Primary Mental Health Project (PMHP):* This project seeks to deter later adjustment difficulties by early recognition and referral. The focus is on strengthening adaptive abilities and encouraging youngtsers to

seek and utilize successful strategies for dealing with life's stressors. PMHP most often serves children with multiple, long-standing problems. Evaluations report a reduction in acting-out, shyness, anxiety, and learning problems and promotion in competencies including adaptive assertiveness, peer sociability, and frustration tolerance. Acting out behavior was the least affected by the program. A longitudinal study found that a PMHP group maintained the gains established during the initial intervention period. There were no significant differences by gender or in academic achievement scores.

*For more information, see:*
*An Evaluation of the Early Mental Health Initiative's Primary Intervention Program and enhanced Primary Intervention Program for the 1994-95 Academic Year.* Submitted to the State of California Department of Mental Health, Rochester, NY: Primary Mental Health Project, Inc., November 1995.

Chandler, C.L., Weissberg, R.P., Cowen, E.L., Guare, J. 1984. Long-term effects of a school-based secondary prevention program for young maladapting children. *Journal of Counseling and Clinical Psychology*, 52(2):165-170.

Cowen, E.L. The Primary Mental Health Project. *Clinician's Research Digest*: Supplemental Bulletin. December, 1991.

*For program information, contact:*
Deborah Johnson, Director of Community Services, Primary Mental Health Project. 685 South Ave. Rochester, NY 14620-1345, (716) 262-2920 / fax: (716) 262-4761

*For evaluation information, contact*:
A. Dirk Hightower, Ph.D., Director, Primary Mental Health Project. University of Rochester Center for Community Study. 575 Mt. Hope Ave. Rochester, NY 14620, (716) 273-5957 / fax: (716) 232-6350

e. *Project for Attention-Related Disorders (PARD):* This is a school-based system that coordinates the medical, psychosocial, behavioral, and educational programs for children with ADHD and their families. Eighteen percent of children are reported as improving greatly, 45% moderately, 11% slightly; 16% were unchanged, and 10% were worse than before enrollment. Evaluation was compromised by incomplete or missing data, high attrition rates, and lack of parental follow-up with a physician.

*For more information, see:*
Williams, R.A., Horn, S., Daley, S.P., Nader, P.R. Evaluation of access to care and medical and behavioral outcomes in a school-based intervention program for attention-deficit hyperactivity disorder.

*For program information, contact:*
Susie Horn, RN, San Diego Unified School District, San Diego City Schools, Health Services Dept., 2716 Marcy Ave., San Diego, CA 92113-2395, (619) 525-7370

*For evaluation information, contact:*
Laura Aird, Community Health Services, American Academy of Pediatrics, 141 Northwest Point Blvd., P.O. Box 927, Elk Grove Village, IL 60009-0927. (708) 228-5005 / fax: (708) 228-5097.

f. *Social Skills Training:* The movement for social skills training is widespread. Below are a few that have been studied.

*f-1 Focused on Externalizing Behaviors*
● Researchers evaluated the effects of a social skills cognitive training program on locus of control for middle school students with behavior problems. Sixth and seventh grade students were randomly selected from three middle schools based on the following criteria: receipt of one or more disciplinary referrals which reflected problems with school authority figures or peers and two or more conduct reports from teachers. They were then randomly assigned to a social skills training program or to a control group within each school. Significant differences were found between the pre- and post-test scores on the measure of locus of control (functioning) and on teacher's ratings of self-control (symptoms). Those participating in the treatment experienced a significant shift in locus of control and were better able to restrict their behaviors than the control group.

*For more information, see:*
Dupper & Krishef (1993). School-based social-cognitive skills training for middle school students with school behavior problems. *Children and Youth Services Review*, 15, 131-142.

- School-based social skills training incorporating cognitive-behavioral strategies was evaluated with African American aggressive, rejected, and nonaggressive rejected children  Children were randomly assigned to the social skills intervention or a control group. Posttreatment and 1-year follow-up indicated the social relations intervention was effective with the aggressive and rejected children (but not with nonaggressive children) in promoting nonimpulsive problem solving (functioning).

  *For more information, see:*
  Lochman, J.E., Coie, J., Underwood, M., & Terry, R. (1993). Effectiveness of a social relations intervention program for aggressive and nonaggressive, rejected children. *Journal of Consulting and Clinical Psychology,* 61, 1053-1058.

- *Anger Coping Program:* This is described as involving 18 sessions that teach affect identification, self-control, and  problem-solving skills. Children role-play and practice skills in a small group setting and under conditions of affective arousal. Goal setting and reinforcement are incorporated to support skill acquisition. Data indicate the program lowers boys observed disruptive and aggressive behavior in the classroom, and in some cases, improves parent ratings of aggressive behavior.

  *For more information, see:*
  Lochman, J.E., Burch, P.R., Curry, J.F. & Lampron, L.B. (1984).  Treatment and generalization effects of cognitive  behavioral and goal-setting interventions with aggressive boys.  *Journal of Consulting and Clinical Psychology, 52,*  915-916.

- *Brainpower Program:* In one study, aggressive 10 to 12 year old boys were paired with non-aggressive peers and exposed to a 12-lesson school-based intervention focusing on improving the accuracy of children's  perceptions and interpretations of others' actions. Compared to a randomized control group, teacher ratings indicated that the Brainpower program was successful in reducing aggressive behavior immediately following the intervention.

  *For more information, see:*
  Hudley, C. & Graham, S. (1993). An attributional intervention to reduce peer-directed aggression among African-American boys. *Child Development*, 64, 124-138.

  Hudley, C., & Graham, S. (1995). School-based interventions for aggressive African-American boys. *Applied & Preventive Psychology,* 4, 185-195.

- *Peer Coping Skills Training Program:* Targeted 94 first to third grade students with high teacher-rated aggression ratings. Students were randomly assigned to either a treatment group or control. In the treatment condition, integrated teams of children were taught prosocial-coping skills in 22 weekly 50-minute sessions. Teams progressed through different skills and levels of difficulty; new skills were not introduced until the team had demonstrated mastery of the previous skills. This format was used to encourage and reinforce peer support. Outcomes at post-test and 6 months following the intervention supported its positive effects. Children in the PCS program were rated by teachers as significantly less aggressive than controls at post-test (p<.02) and follow-up (p<.01). Significant improvements were  also noted in the intervention children's prosocial coping and teacher-rated social skills.

  *For more information, see:*
  Prinz, R.J., Blechman, E.A., & Dumas, J.E. (1994).  An evaluation of peer coping-skills training for childhood aggression.  *Journal of Clinical Child Psychology, 23,* 193-203.

- *Social Relations Program* -- This is described as consisting of 26 social skills training sessions on improving the skills needed for entrance into peer groups and positive peer play. In one study, children were also trained in social problem solving and anger management. The majority of sessions were held individually but 8 were conducted in small groups and provided children with some time to practice the skills being taught. The program was evaluated on a sample (n=52) of 9 to 11-year-old, African-American children. Results indicated that compared to matched controls, the aggressive-rejected children were rated as significantly less aggressive by teachers and more socially accepted by peers at post-test. The effects of the intervention were maintained at one-year follow-up. Students in the aggressive-rejected intervention group were rated by teachers as significantly less aggressive (p<.03) and more prosocial (p<.03) compared to aggressive-rejected students in the control group.

  *For more information see:*
  Coie, J.D., Lochman, J.E., Terry, R., & Hyman, C. (1992).  Predicting early adolescent disorder from childhood

aggression and peer rejection. *Journal of Consulting and Clinical Psychology, 60*, 783-792.

## f-2  *Focused on Internalizing Behaviors*

- Disliked first-, second-, and third-grade boys who showed high levels of negative social behavior during pretreatment observations were randomly assigned to one of four conditions: instructions and coaching in positive behaviors; prohibitions and response cost for negative behaviors; a combination of instructions and prohibitions; and no treatment. Interventions were implemented during 10 half-hour, supervised, small group play sessions; treatment effects were assessed using behavioral observations, and peer and teacher ratings. A comparison was made between the effects of positive instructions and negative inhibitions in a social skills training program for boys with negative social behavior and were rejected by their peers. Results showed that the boys who received the combined program showed immediate post treatment decreases in negative initiations, later decreases in negative peer responses, and stable positive peer interactions (symptom reductions and functional improvements).

  *For more information, see:*
  Bierman, Miller & Stabb (1987). Improving the social behavior and peer acceptance of rejected boys: Effects of social skill training with instructions and prohibitions. *Journal of Consulting and Clinical Psychology,* 55, 194-200.

- Investigation of an interactive videodisc social skills training program on peer acceptance was performed. Children in six elementary school resource rooms were randomly assigned to participate in the treatment or to continue their resource room program. Experimental group students scored significantly higher on a post-training measure of peer acceptance than did control group students (functioning).

  *For more information, see:*
  Thorkildssen (1985). Using an interactive videodisc program to teach social skills to handicapped children. *American Annals of the Deaf*, 130, 383-385.

- A study evaluated the effectiveness of a stress management program on children's locus of control orientation, self-concept and acquisition of appropriate coping strategies (functional outcomes). Sixty-five students from an inner-city school were randomly assigned to the stress management program or control group. The children in the stress management program demonstrated a more internal locus of control and a higher self concept on school-related tasks and behavior problems.

  *For more information, see:*
  Henderson, Kelbey, & Engebretson (1992). Effects of a stress-control program on children's locus of control, self-concept, and coping behavior. *School Counselor*, 40, 125-131.

- A social learning approach was used to teach the acquisition of behavioral skills to resist the pressures to misuse alcohol (symptom and functioning). 5,635 students from 213 classrooms were assigned randomly by school building to one of three experimental conditions: social skills training, social skills training plus follow-up training, and no training control. Treatment groups showed significantly greater awareness of curriculum content than did the control group at 8-week follow-up. Alcohol use and misuse were not significantly different between treatment and control groups due to low prevalence in both groups.

  *For more information, see:*
  Dielman, Shope, Butchart, and Campanelli (1986). Preventions of adolescent alcohol misuse: An elementary school program. *Journal of Pediatric Psychology*, 11, 259-282.

- *Penn Prevention Program* -- This is described as altering the cognitive distortions and improving coping skills in at-risk youth. Results from a quasi-experimental evaluation study suggested that the program resulted in clinically significant reductions in depressive symptoms immediately post-treatment and at a 6-month follow-up.

  *For more information, see:*
  Gillham, J.E., Reivich, K.J, Jaycox, L.H, & Seligman, M.E.P. (1995).  Prevention of depressive symptoms in schoolchildren:  Two-year follow-up. *Psychological Science,* 6, 343-351.

g. *ALL STARS* : This is a character-based approach to preventing high-risk behaviors in teens based on over twenty years of research. It addresses four topics related to developing positive character: Developing positive ideals that don't fit with high-risk behavior; Creating a belief in conventional norms; Building strong personal commitment; Bonding with school, prosocial institutions, and family. In schools in Louisville and Lexington, Kentucky, it is being evaluated through funding from the National Institute on Drug Abuse to determine effectiveness in preventing alcohol, tobacco, marijuana and inhalant use, on suppressing violence and delinquency, and on postponing sexual activity among teen. Effects on student drug use and violence measured in May, 1997, immediately after the delivery of the program indicate that, while the prevalence and frequency of drug use increases as young people grow older, two versions of the program reduced drug use as compared to controls. Also reports short tem suppression of onset of sexual activity.

*For program information, contact:*
Tanglewood Research, Inc., PO Box 1772, Clemmons, NC 27012, Ph: 800/826-4539
(910) 778-0900 http://www.tanglewood.net/products/allstars
Donna Durden, Christian County Public Schools, Hopkinsville, KY Ph: 270/887-1311

*For evaluation information, contact*:
Dr. Nancy Harrington, Center Prevention Research, University of Kentucky, 1a 1151
Red Mile Rd Lexington Ky 40504   Ph:  606/257-5588   Fax:  606/257-5592
ngrant@pop.uky.edu