4

The Empirical Base of School-Based Mental Health Services

The purpose of this chapter is to describe the evidence-base for mental health services that are appropriate for delivery in schools.

Examining the Evidence

It is clear that schools are now formally engaged in implementing a range of programs to meet the social and emotional needs of their students in order to facilitate learning. While these efforts range from support for students from school personnel such as school counselors to very specific packaged programs such as character education, most schools are engaged in these activities. Zins, Weissberg, Wang, and Walberg (2004) report that a typical school delivers, on average, 14 separate programs that broadly address social-emotional issues. Of these programs, however, most were not empirically-based. Also, there is no evidence of a systematic deployment of these programs, but rather, they seem to emerge in response to immediate pressures or trends.

The purpose of this chapter is to describe the evidence-base for mental health services that are appropriate for delivery in schools. Overall, mental health services in this review are defined as any strategies, programs, or interventions aimed at preventing and treating mental health problems in youth and can range from programs focused at the universal, selective, and indicated levels of prevention. Because there are a variety of sources describing the evidence-base on mental health services, it is hoped that this review will start to identify the breadth and depth of the knowledge base so that it can be both better implemented by practitioners and strengthened by future research efforts.

It should be noted that in this survey of evidence-based programs, the majority of these programs do operate in schools. Therefore, it is hoped that an integrated list of evidence-based programs will facilitate discussions between mental health and school decision-makers as they consider the role of evidence-based programs for provision of school-based mental health services in their communities. As recommended in the previous chapter, any selection of individual programs and practices will be strengthened when embedded in a system-wide model.

SAMHSA maintains a web-based National Registry of Evidence-based Programs and Practices. Programs listed in this registry are classified as either *model*, *effective*, or *promising*.

Method

The review consisted of an examination of

- existing compendia of empirically-supported programs ($N = 7$),
- a web-based resource describing established and probably efficacious approaches for four specific disorders,
- four articles summarizing empirically-based programs, and
- recently published articles identifying recent developments and resources in SBMH.

Compendia of Empirically-Supported Programs

Seven lists of empirically-supported mental health programs for children were selected for this review. The following comprise the best known, and most frequently referenced listings: (1) Substance Abuse and Mental Health Services Administration (SAMHSA), (2) Collaborative for Academic, Social, and Emotional Learning (CASEL), (3) U.S. Department of Education (USDOE), (4) Prevention Research Center for the Promotion of Human Development at Penn State, (5) Center for the Study and Prevention of Violence (CSPV), (6) Center for School Mental Health Assistance (CSMHA), and (7) Washington State Institute for Public Policy.

1. Substance Abuse and Mental Health Services Administration (SAMHSA)

Over the past several years, the Substance Abuse and Mental Health Services Administration (SAMHSA) has maintained a web-based National Registry of Evidence-based Programs and Practices (NREPP). To be listed on this registry, program candidates submit published and unpublished program materials to NREPP for review by teams of scientists who rate each program according to 15 criteria of scientific soundness (see Table 4.1 for a description of these criteria). Though all programs are scored on each of the 15 rating parameters, scores that determine program classification as either *model*, *effective*, or *promising* are based on ratings of integrity and utility, which serve as summaries for the other 13 criteria.

To be designated a *Model Program* by SAMHSA, a program must be rated as effective (based on the criteria of scientific soundness) and developers must have the capacity and have coordinated and agreed with SAMHSA to provide quality materials, training, and technical assistance to practitioners who wish to adopt their programs. *Effective Programs* have met all the criteria of a model program except developers have yet to agree to work with SAMHSA to support broad-based dissemination of their programs but may disseminate their programs themselves. *Promising Programs* have been evaluated and are scientifically defensible but do not yet have sufficient scientific support to meet standards set by SAMHSA for designation as an effective or model program

Table 4.1

Rating criteria for programs submitted for review to SAMHSA's National Registry of Evidence-Based Programs and Practices (Schinke, Brounstein, & Gardner, 2002, p. 15)	
Theory	The degree to which programs reflect clear, well-articulated principles about behavior and how it can be changed.
Intervention fidelity	How the program ensures consistent delivery.
Process evaluation	Whether program implementation was measured.
Sampling strategy and implementation	How well the program selected its participants and how well they received it.
Attrition	Whether the program retained participants during its evaluation.
Outcome measures	The relevance and quality of evaluation measures.
Missing data	How the developers addressed incomplete measurements.
Data collection	The manner in which data were gathered.
Analysis	The appropriateness and technical adequacy of data analyses.
Other plausible threats to validity	The degree to which the evaluation considers other explanations for program effects.
Replications	Number of times the program has been used in the field.
Dissemination capability	Whether program materials are ready for implementation by others in the field.
Cultural- and age-appropriateness	The degree to which the program addresses different ethnic-racial and age groups.
Integrity	Overall level of confidence of the scientific rigor of the evaluation.
Utility	Overall pattern of program findings to inform theory and practice

(Schinke, Brounstein, & Gardner, 2002). In early 2006, the website listed 66 model, 37 effective, and 55 promising programs. Of the 66 model programs listed, 56 (85%) focus on children and/or their parents, and these programs are discussed in the results section of this chaper.

In 2006, SAMHSA will be revising its review criteria for programs eligible for the National Registry of Evidence-Based Programs and Practices (NREPP) and expanding the registry to include population-, policy- and system-level outcome ratings for interventions (Request for Comments; NREPP, 2005). All programs currently listed within the registry will be re-reviewed under the new criteria. The 16 new review criteria for programs aimed at individual-level outcomes are provided in Appendix E. The definitions of the expanded areas of population-, policy-, and systems-level outcomes and the 12 review criteria for these outcomes are provided in Appendix F.

2. Collaborative for Academic, Social, and Emotional Learning (CASEL)

In March 2003, the Collaborative for Academic, Social, and Emotional Learning (CASEL) issued a report on evidence-based social and emotional learning programs.

Founded in 1994, CASEL's mission is to enhance children's success in school and life by promoting coordinated, evidence-based social, emotional, and academic learning as an essential part of education from preschool though high school. To help achieve this mission, CASEL collaborates with an international network of researchers and practitioners in the fields of social and emotional learning, prevention, positive youth development, and education reform to promote social and emotional learning efforts in schools.

The common core of the 80 programs selected by CASEL is that they all increased children's sense of connectedness or attachment to school and increased skills for setting goals, solving problems, achieving self discipline, or character development or responsibility.

CASEL searched the extant literature and asked for nominations of evidence-based programs that provide curriculum for schools to use to increase the social and emotional competency of the general student population. They identified 242 programs for review, and selected only those programs (a) that are school-based and provide curriculum (of at least eight lessons) for teachers to deliver to the general student population; (b) whose curriculum covers two consecutive grades or provides a structure that promotes lesson reinforcement beyond the first year; and (c) are available nationally.

Of the 242 programs reviewed, 80 met the specified criteria. Of the 80 programs, only 11 or 14% of the programs met the highest level of scientific rigor set by CASEL: multiple studies (using different samples) that document positive behavioral outcomes at post-testing, with at least one study indicating positive behavioral impact at least one year after the intervention ended.

The common core of the 80 programs selected by CASEL is that they all increased children's sense of connectedness or attachment to school and increased skills for setting goals, solving problems, achieving self discipline, character development, or responsibility. The 11 programs meeting the highest level of rigor are described in the results section of this chapter.

3. U. S. Department of Education (USDOE)

In 1998, a panel comprised of 15 experts in safe, disciplined, and drug free schools acting on behalf of the Department of Education's Office of Educational Research and Improvement (OERI) began to document educational programs effective in combating both substance abuse and violence among youth. Applications were solicited from any program sponsor who believed his or her program might meet the review criteria. Of the 124 programs reviewed, 33 programs were designated as "promising" and nine programs were designated as exemplary. There were seven criteria that had to be met in order for a program to be considered exemplary: (a) evidence of

efficacy, (b) quality of the program goals, (c) a sound rationale, (d) program content is appropriate for intended population, (e) program implementation is sound, (f) program integrates into the educational mission of schools, and (g) the program can be replicated. The monograph describing these programs was published in 2001, and the nine programs classified as exemplary are described in the results section of this chapter.

Written in 2000 by Greenberg, Domitrovich, and Bumbarger, this review included effective universal, selective, and indicated prevention programs that were found to produce improvements in specific psychological symptomatology or in factors generally considered to be directly associated with increased risk for child mental disorders.

4. Prevention Research Center for the Promotion of Human Development at Penn State

Written in 2000 by Greenberg, Domitrovich, and Bumbarger, this review included effective universal, selective, and indicated prevention programs that were found to produce improvements in specific psychological symptomatology or in factors generally considered to be directly associated with increased risk for child mental disorders. Because of this, studies were included if the child showed early problems or was identified as being high-risk for developing a later disorder; studies were excluded if the children were formally identified as having a DSM diagnosis. Programs were included if they had been evaluated using either a randomized-trial design or a quasi-experimental design that used an adequate comparison group. Studies were required to have both pre- and post-findings, and preferably follow-up data to examine the duration and stability of program effects. In addition, it was required that the programs have a written manual that specifies the model and procedures to be used in the intervention. Finally, it was necessary to clearly specify the sample and their behavioral and social characteristics.

Programs were identified through an extensive review of the literature and reputable internet sources (i.e., Centers for Disease Control and Prevention, NIMH Prevention Research Center). Over 130 programs were identified, 34 of which met criteria for inclusion in the review. Those 34 programs are described in the results section of this chapter.

The project, called Blueprints for Violence Prevention, has identified 11 prevention and intervention programs that meet criteria for effectiveness.

5. Center for the Study and Prevention of Violence (CSPV)

In 1996, the Center for the Study and Prevention of Violence (CSPV), at the University of Colorado at Boulder, began an initiative to identify violence prevention programs that are effective. The project, called Blueprints for Violence Prevention, has identified 11 prevention and intervention programs that meet criteria for effectiveness. To be classified as a *model* program or a *Blueprint* program, the program must have met three criteria: (a) empirical evidence of prevention effect using a strong research design, (b) a documented sustained effect overtime, and (c) multiple site replications. While model programs must meet all three criteria (n = 11), programs classified as *promising* must meet only the first criterion (n = 16). The 11 model programs selected by CSPV are described in the results section of this chapter.

6. Center for School Mental Health Assistance (CSMHA)

The Center for School Mental Health Assistance (2002) reviewed several sources of empirically-supported interventions to produce their own overview of interventions believed suitable for adaptation and implementation in schools.

The Center for School Mental Health Assistance (2002) reviewed several sources of empirically-supported interventions to produce their own overview of interventions believed suitable for adaptation and implementation in schools. However the criteria for making this determination were not explicit. Their list of programs, therefore, included mostly behavioral or cognitive-behavioral interventions that were most likely covered by other organizations distilling empirically-based interventions.

CSMHA's sixteen-page document presents a description of 40 programs divided by diagnostic condition (i.e., anxiety, depression, and conduct problems) and by prevention level; indicated (n = 12), selective (n = 12), and universal (n = 16), and may be a useful resource for practitioners. Overall, approximately 8% of the indicated programs, 42% of the selective programs, and 69% of the universal programs or updated versions of these programs are contained in the description of programs in the results section of this chapter.

The titles of the programs contained within the CSMHA document are listed in Appendix A. The lack of concordance between the CSMHA list and the list of programs created by other sources reflects not only the rapid evolution of new approaches and packaged programs, but also the increases in the empirical rigor required by more recent reviews.

7. Washington State Institute for Public Policy (WSIPP)

The Washington State Institute for Public Policy issued a report on the benefits and cost of evidence-based programs that focused on reducing negative social outcomes.

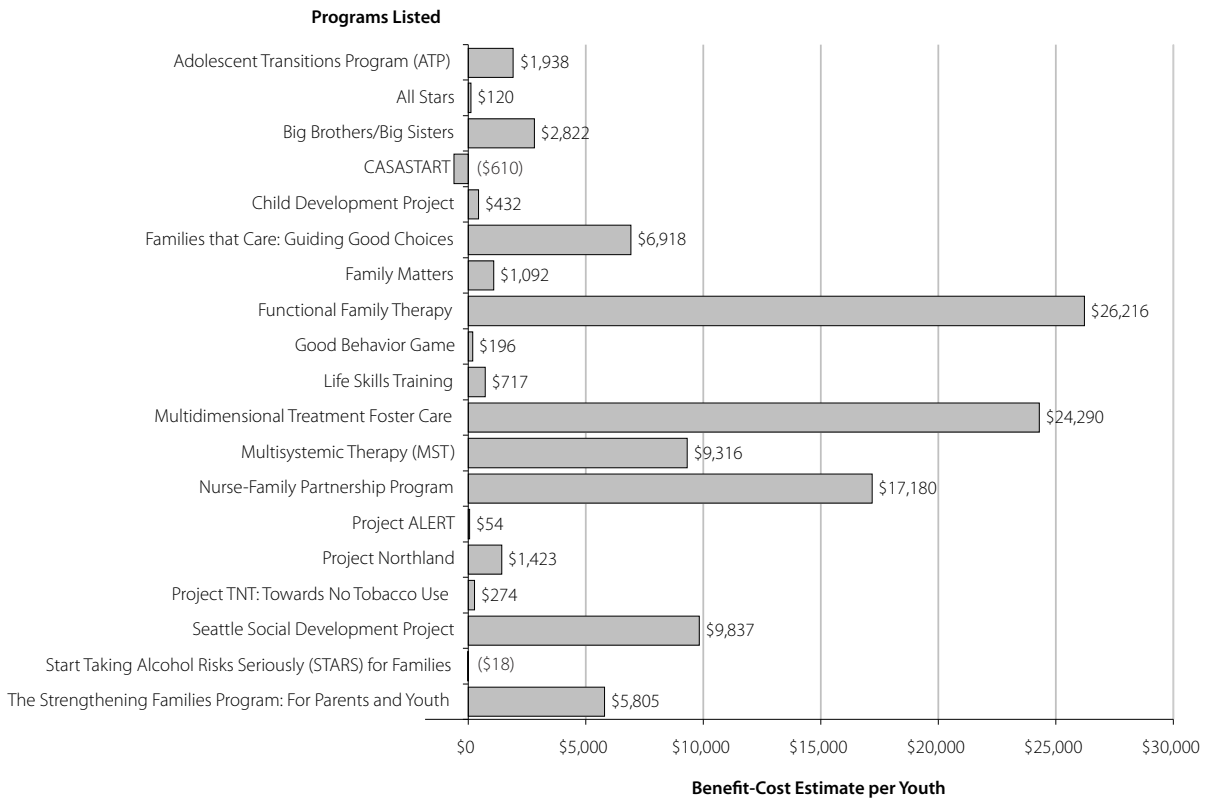
The Washington State Institute for Public Policy issued a report on the benefits and cost of evidence-based programs (Aos, Lieb, Mayfield, Miller, & Pennucci, 2004). As mandated by the Washington State Legislature, this report focused on a limited number of programs and only those approaches that focused on reducing the following negative social outcomes for youth: (a) crime, (b) substance abuse, (c) teen pregnancy, (d) suicide, (e) child abuse and neglect, and (f) increasing the positive social outcome of educational attainment.

To be included in this analysis, a program or approach had to have one rigorous evaluation that targeted one of the six outcomes listed above and be applicable to real world settings. Additionally, some programs and approaches were excluded because the measured outcomes could not be monetized. For example, although one program documented symptom reduction on a scale that measured psychopathology (e.g., changes on the Child Behavior Checklist), the change in score could not be associated with a monetary amount and therefore the program could not be part of the WSIPP analysis. Changes in standardized scale scores (i.e., symptom reduction) is a common outcome tool for mental health researchers, suggesting that many mental health programs may have been excluded from the WSIPP analysis due to the monetary measurement requirement.

The analysis yielded benefit minus cost information for 61 evidence-based programs and approaches. The 61 programs are listed in Appendix B, along with the benefit minus cost estimate per youth, the number of studies or trials used to calculate the cost-benefit analysis, and the social outcomes influenced by each program. Nineteen (31%) of the program/approaches described by WSIPP also appear in one of the other compendia of programs (see figure 4.1).

figure 4.1

Programs Described by WSIPP Listed in Compendia



What is especially interesting about this compendium is the unique approach taken to include programs. WSIPP clearly states that they wanted programs targeted at specific outcomes rather than programs that may fit into a school or be classified as a mental health program. For example, they targeted empirically-supported programs that reduce crimes committed by adolescents. While committing a crime would certainly be considered a negative outcome and is often considered poor functioning for a teen attending a mental health program, is a program targeting crime reduction

a mental health program? Is a program that targets the prevention of teen pregnancy a "mental health program?" The approach adopted by WSIPP points to the broad array of outcomes and functioning typically subsumed under the topic of mental health interventions.

Web-Based Services Guide for Consumers and Practitioners

www.effectivechildtherapy.com defines and summarizes the established and "probably efficacious" treatments for the following categories of disorders: Anxiety, Depression, Attention Deficit Hyperactivity Disorder, and Conduct/Oppositional Problems.

A website to inform the general public as well as practitioners regarding the most up to date information about mental health practice for children and adolescents has been created through a partnership between the Society of Clinical Child and Adolescent Psychology (Division 53 of the American Psychological Association) and the Network on Youth Mental Health funded by the MacArthur Foundation. This web site (www.effectivechildtherapy.com) defines and summarizes the established and "probably efficacious" treatments for the following categories of disorders: Anxiety, Depression, Attention Deficit Hyperactivity Disorder, and Conduct/Oppositional Problems. Under the heading of Anxiety for example, eight associated disorders are listed including Generalized Anxiety. While there are no well-established treatments described for this disorder, cognitive behavioral therapy, family anxiety management, modeling, and relaxation training are described under the "probably efficacious" treatment heading.

This is a beneficial resource for the public and practitioners wanting a quick summary of effective treatment options for a variety of diagnostic conditions. The number of disorders covered by this site may be expanded in the near future (Weisz et al., 2005). Because this site only provides overarching summaries and does not describe the research or list specific programs, the descriptions from this site could not be integrated into the results section of this chapter.

Articles that Discuss and Summarize Empirically-Supported School-Based Mental Health Approaches

The articles selected go beyond identifying individual programs, but rather seek to glean evidence-based strategies that cut across programs.

Our review searched out critiques of evidence-based literature that identified common or core features of evidence-based practice. The articles selected—and described below—go beyond identifying individual programs, but rather seek to glean evidence-based strategies that cut across programs.

1. Rones and Hoagwood (2000) and Hoagwood (2006)

In order to assess the empirical support for school-based mental health programs, Rones and Hoagwood (2000) conducted a review of the literature published between 1985 and 1999. To be included as an empirically-supported school-based mental health program, the study must have utilized a rigorous design and included a control group or multiple baseline approach. The study also had to include a school-based service, defined as "any program, intervention, or strategy applied in a school setting that was

specifically designed to influence students' emotional, behavioral, or social functioning" (p. 224). Of the 5,128 entries retrieved, less than 1% (n = 47) of the studies met the requirement of having a rigorous research design. The remaining empirical studies were categorized as describing 37 strategies focusing on either emotional or behavior problems (n = 4), depression (n = 5), conduct problems (n = 22), stress (n = 2), or substance abuse problems (n = 12). The outcome domains of each study were categorized as focusing on (a) reducing symptoms, (b) increasing functioning, (c) describing services/systems, or (d) a combination of these.

Of the 37 strategies and interventions described by the 47 studies, 20% (n = 7) were found to be ineffective at treating the targeted problem. The remaining strategies were found to be either effective (35%, n = 13), mixed in their effectiveness (32%, n = 12), or a combination of effective on some outcomes and not on others (13%, n = 5; see Appendix C for a list of the strategies described in this review).

The authors summarized factors associated with the effectiveness of the empirically-supported strategies (see in Table 4.2). The first factor was an association between program effectiveness and consistent program implementation; the second factor was the use of multi-component programs that targeted the ecology of the whole child. Three effective prevention interventions, for example, targeted parents, teachers, and peers in the intervention. Program effectiveness was also associated with multiple approaches to changing behavior, such as informational presentations combined with skill training. It appears that these multiple formats were successful because they focused on the change agents that were theoretically linked to the target behaviors. A related factor was that programs with the strongest evidence of an impact were those directed toward changing specific behaviors and skills associated with the targeted problem (e.g., depression, conduct problems), while more general activities such as field trips did not seem to enhance the intervention.

The final factor associated with the effectiveness of a strategy was the integration of the program into the general classroom curriculum. That is, mental health programs delivered as an integral part of the classroom rather than as a separate and specialized session were associated with more positive outcomes. This suggests the importance of the integration of services within the normal routine of the school in order for the programs not only to be effective but sustained.

In a more recent review of the empirical literature, Hoagwood (2006) examined over 2,000 articles produced between 1990 and 2004. Her examination revealed that 63 articles (< 3%) met her criteria of being a rigorously tested intervention dealing with mental health problems in

table 4.2

Factors Associated with Program Effectiveness (Rones & Hoagwood, 2000)

1. Consistent implementation
2. Multi-component programs (child, teacher, and parent components)
3. Multiple approaches (informational sessions combined with skill training)
4. Targeting specific behaviors and skills
5. Developmentally-appropriate strategies
6. Strategies integrated into the classroom curriculum

children. Twenty-three of these studies (37%) tested the effects of a program on both academic and mental health outcomes and 14 of these studies found an impact on both types of outcomes. The remaining 40 studies (63%) examined only mental health outcomes with only 38 demonstrating effectiveness in this area. Additionally, the majority of studies (74%) were conducted with young children while only six studies focused on middle or high school populations.

2. Browne, Gafni, Roberts, Byrne, and Majumdar (2004)

To determine common elements of mental health programs aimed at providing preventive or early intervention services to at-risk children, Browne, Gafni, Roberts, Byrne, and Majumdar (2004) synthesized 23 reviews describing the empirical literature on prevention strategies implemented in or involving schools. These reviews were published between 1984 and 2000 and represent hundreds of studies. The common elements of effective prevention and early intervention programs described in this analysis are presented in Table 4.3.

table 4.3

Common Elements of Prevention and Early Intervention Programs (Browne et al., 2004)

1. Programs aimed at developing protective factors have shown greater positive results than programs aimed at reducing pre-existing negative behaviors, but vary by age, gender, and ethnicity of children
2. Younger children show greater positive results than older children, but some programs are effective for older children
3. Programs directed to address a specific problem have greater effect than broad, unfocused interventions
4. Programming that has multiple elements involving family, school, and community are more likely to be successful than efforts aimed at a single domain
5. Strategies were enhanced when based on and informed by sound theoretical foundations
6. Fear-inducing tactics and delivering information in only a didactic format were generally less effective
7. Long-term strategies are more effective than short-term strategies when they have the continued presence of appropriate adult staff or mentors

3. Greenberg, Weissberg, O'Brien, Zins, Fredricks, Resnik, et al. (2003)

Greenberg and colleagues (2003) conducted a synthesis of the empirical literature on strategies aimed at increasing positive youth development and mental health; decreasing substance use; antisocial behavior, school nonattendance, and drug use; and the influences on learning and academic performance. They concluded that there is a solid research base indicating that well-designed, well-implemented, school-based prevention and youth

development programming can positively influence a diverse array of social, health, and academic outcomes. This synthesis found that key strategies for effective school-based prevention programming involve student-focused, relationship-oriented, and classroom and school-level organizational changes (see Table 4.4).

4. Weisz, Sandler, Durlak, and Anton (2005)

In this recent article, Weisz and colleagues (2005) propose linking mental health prevention and treatment within an integrated model. Part of the research agenda to achieve this model calls for the continued development and wider implementation of evidence-based prevention and treatment interventions. They conclude that more than 500 discrete, named psychotherapies are now practiced with children and more than 1,500 outcome studies have been conducted. The authors summarize the results of numerous meta analyses on mental health treatments (primarily psychotherapy studies) and these results are presented in Table 4.5.

table 4.4

Key strategies for effective school-based prevention programming involve the following student-focused, relationship-oriented, and classroom- and school-level organizational changes (Greenberg et al., 2003, p. 470)

1. Teach children to apply social and emotional learning (SEL) skills with ethical values in daily life through interactive classroom instruction and provide frequent opportunities for student self-direction, participation, and school and community service
2. Foster respectful supportive relationships among students, school staff, and parents
3. Support and reward positive social, health, and academic behavior through systematic school-family-community approaches
4. Multi-year, multi-component interventions are more effective than single component short-term programs
5. Competence and health promotion efforts are best begun before signs of risky behaviors emerge and should continue through adolescence

table 4.5

Summary of the effectiveness of youth psychotherapy (Weisz et al., 2005, pp. 630-631)

1. The average treated child was functioning better after receiving psychotherapy than 75% of the children in the control group
2. Beneficial treatment effects were still evident six months after treatment concluded
3. Treatment effects are larger for the particular problem addressed in treatment than for global problems not specifically addressed in treatment
4. Meta analyses of cognitive behavior therapy (CBT) show substantial effects while family therapy show respectable effects
5. Studies of treatment "as usual" in settings in which therapists were able to use their clinical judgment to deliver treatment as they saw fit, not constrained by evidence-based interventions or manuals, and in which there was a comparison of their treatment to a "control group" were found to have no treatment benefit
6. Linking multiple treatments together such as those promoted under systems of care have yet to demonstrate positive effects at the clinical level

Review of Recent Literature and Other Resources

In an attempt to capture efforts that had emerged in the recent literature, we conducted a review of the literature from 1999 to 2005. Three data bases (e.g., Ovid Medline, Ovid PsycInfo, and ERIC) were searched using the following combination of key words: "School," "Mental Health," and "Children." This search resulted in an identification of 1,182 citations. Each citation was reviewed to determine if it described a quantitative analysis of a school-based program, used standardized measures, employed a comparison group, was published in a peer-reviewed journal, and was written in English. While only a few studies of school-based programs were identified as having rigorous empirical designs, this process uncovered many resources on the topic that may be of help to the field. The studies unearthed in this review are listed in Table 4.6, and the resources are presented in Tables 4.7 and 4.8.

Several of the studies reviewed point to recent developments and trends in developing school-based mental health services. Weiss and his colleagues, after documenting the lack of efficacy of school-based individual counseling, have begun to augment their school-based program by integrating teachers. The results of a controlled study (Weiss, Harris, Catron & Han, 2003) indicated the RECAP program (Reaching Educators, Children, and Parents), a cognitive-behavioral and social skills training program for elementary school children with internalizing and externalizing problems, is effective for both types of problem behaviors. Another recent study (Mufson et al., 2004) of a randomized clinical trial of interpersonal therapy implemented in five school-based clinics in New York City revealed that a sample of Hispanic adolescent females with depression demonstrated significantly better outcomes than youth in the treatment as usual condition. An article by Armbruster and Lichtman (1999) examined changes over time for students served in a school-based mental health clinic versus those students served in a community-based clinic. Results indicate small but statistically significant improvement in both groups of students.

The remaining studies revealed the wide range of mental health problems and populations addressed by school-based services. Included in these articles were studies of youth exposed to violence, traumatized Latino immigrant children, and children experiencing homelessness or post disaster trauma. Other articles studied the effectiveness of prevention programs and the long-term outcomes of children who participated in early intervention programs.

table 4.6

Literature Review Results – Articles describing a quantitative analysis of a school-based programs, using standardized measures, including a comparison group, and published in a peer-reviewed journal between 1999 and 2005.

1. Armbruster, P., & Lichtman, J. (1999). Are school-based mental health services effective? Evidence from 36 inner city schools. *Community Mental Health Journal, 35*(6), 493-504.
2. Chemtob, C. M., Nakashima, J. P., & Hamada, R. S. (2002). Psychosocial intervention for postdisaster trauma symptoms in elementary school children: A controlled community field study. *Archives of Pediatrics & Adolescent Medicine, 156*, 211-216.
3. Forness, S. R., Serna, L. A., Nielsen, E., Lambros, K., Hale, M. J., & Kavale, K. A. (2000). A model for early detection and primary prevention of emotional or behavioral disorders. *Education and Treatment of Children, 23*(3), 325-345.
4. Han, S., & Weiss, B. (2005). Sustainability of teacher implementation of school-based mental health programs. *Journal of Abnormal Child Psychology, 33*(6), 665-679.
5. Ialongo, N., Poduska, J., Werthamer, L., & Kellam, S. (2001). The distal impact of two first-grade preventive interventions on conduct problems and disorder in early adolescence. *Journal of Emotional and Behavioral Disorders, 9*(3), 146-160.
6. Kataoka, S. H., Stein, B. D., Jaycox, L. J., Wong, M., Escudero, P., Tu, W., et al. (2003). A school-based mental health program for traumatized Latino immigrant children. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*(3), 311-318.
7. Mufson, L., Dorta, K. P., Wickramaratne, P., Nomura, Y., Olfson, M., & Weissman, M. M. (2004). A randomized effectiveness trial of interpersonal psychotherapy for depressed adolescents. *Archives of General Psychiatry, 61*(6), 577-584.
8. Nabors, L., Sumajin, I., Zins, J., Rofey, D., Berberich, D., Brown, S., et al. (2003). Evaluation of an intervention for children experiencing homelessness. *Child & Youth Care Forum, 32*(4), 211-227.
9. Reynolds, M., Brewin, C. R., & Saxton, M. (2000). Emotional disclosure in school children. *Journal of the American Academy of Child and Adolescent Psychiatry, 41*(2), 151-159.
10. Stein, B. D., Jaycox, L. H., Kataoka, S. H., Wong, M., Tu, W., Elliot, M. N., et al. (2003). A mental health intervention for school children exposed to violence: A randomized controlled trial. *Journal of the American Medical Association, 290*(5), 603-611.
11. Weiss, B., Harris, V., Catron, T., & Han, S. S. (2003). Efficacy of the RECAP intervention program for children with concurrent internalizing and externalizing problems. *Journal of Consulting and Clinical Psychology, 71*(2), 364-374.

table 4.7

Additional resources on evidence-based mental health programs	
Web sites describing programs that are evidence-based	
• American Youth Policy Forum	http://www.aypf.org/
• Child Welfare League of America, Research to Practice Initiative:	http://www.cwla.org/programs/r2p/default.htm
• CSAP's Prevention Portal: Model Programs	http://permanent.access.gpo.gov/lps9890/lps9890/www.samhsa.gov/centers/csap/modelprograms/default.htm
• National Center for Injury Prevention and Control, Centers for Disease Control and Prevention Using Evidence-Based Parenting Programs to Advance CDC Efforts in Child Maltreatment Prevention:	http://www.cdc.gov/ncipc/pub-res/parenting/ChildMalT-Briefing.pdf
• National Child Traumatic Stress Network Empirically Supported Treatments and Promising Practices:	http://www.nctsn.org/nccts/nav.do?pid=ctr_top_trmnt_prom
• NASP (National Association of School Psychologists) Center: Exemplary Mental Health Programs Online Edition	http://naspcenter.org/exemplary.html
Office of Juvenile Justice and Delinquency Prevention's Model Programs Guide (MPG):	http://www.dsgonline.com/mpg2.5/mpg_index.htm
• Preventing Drug Use Among Children and Adolescents: A Research Based Guide for Parents, Educators, and Community Leaders:	http://www.drugabuse.gov/pdf/prevention/RedBook.pdf
• Promising Practices Network (RAND)	http://www.promisingpractices.net/
• School Mental Health Alliance:	http://www.kidsmentalhealth.org/SchoolMentalHealthAlliance.html
• Strengthening America's Families	http://www.strengtheningfamilies.org/
• Task Force on Evidence Based Interventions in School Psychology	http://www.sp-ebi.org/
• UCLA Center for Mental Health in Schools Clearinghouse:	http://smhp.psych.ucla.edu/clearing.htm
• University of Maryland Center for School Mental Health Analysis and Action:	http://csmha.umaryland.edu/
• What Works Clearinghouse:	http://whatworkshelpdesk.ed.gov

table 4.8

Additional resources on evidence-based mental health programs

Articles and Books

Special Section of the *Journal of Clinical and Adolescent Psychology* (Sept 2005, vol. 34, No.3) provides 7 articles discussing the evidence base for assessment of various disorders.

Burns, B. J., Hoagwood, K. E., & Lewis, M. (Eds.). (2004). Evidence-based practice, part I: Research update. *Child and Adolescent Psychiatric Clinics of North America, 13*(4).

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With the current keen interest in evidence-based practices in SBMH, a spirited discussion has developed, and continues, concerning the nature, amount, and quality of evidence that designates an intervention as being empirically or evidenced-based.

Results

These results will be organized around two key issues. First, we critique the various requirements used to designate a program as *empirically-based*. Second, an integrated view of the programs designated as empirically-based is presented. Programs that are described by any of the five sources included in the method section are described below.

Level of Evidence Required for a Program to be Designated as "Empirically-Based"

What constitutes "evidence?" With the current keen interest in evidence-based practices in SBMH, a spirited discussion has developed, and continues, concerning the nature, amount, and quality of evidence that designates an intervention as being empirically or evidenced-based (e.g., Jensen, Weersing, Hoagwood, & Goldman, 2005). This discussion is more than an academic debate because it is becoming clear that evidence-based interventions are becoming the "coin of the realm" for the various service providing agencies. There already are examples of state level initiatives (e.g., Michigan, Oregon, and Texas) and third party payers that require a percentage of contracted services to be rigorously, empirically-supported interventions for reimbursement.

It is also clear from our review of the compendia of evidence-based practices that there is a range of criteria used to designate an "evidence-based" practice. For example, SAMHSA has 15 criteria used to designate a program as being a model program, an effective program, or a promising program. The USDOE has seven criteria that are applied by a 15 member expert panel to determine if a program is exemplary or promising. Fortunately, our review of the criteria used by various panels reveals that while there is no universally accepted definition of an evidence-based program at this time, there is some consistency in terms of core criteria. For example, a randomized controlled trial or very rigorous quasi-experimental design is required across all of the sources. They may differ in the number of studies and requirements for multiple, independent researchers that are necessary to meet criteria, but there is an emphasis on an empirical demonstration of effectiveness.

While the variability in criteria for designating an intervention as evidence-based is somewhat frustrating, it should not lead administrators, policy-makers, or practitioners to conclude that the data base is flawed. On the contrary, we present, in this chapter, a preponderance of evidence that supports the effectiveness of many SBMH interventions that are designed to either prevent the development of emotional problems in children or to effectively improve functioning across multiple domains for children who exhibit emotional disturbance. Decision makers, in both the education and mental health systems, have many options from which to choose in implementing SBMH services. The task becomes to match your population and systems model with the programs available.

As the research base grows, it can be expected that methods and designs will become even more sophisticated in evaluating evidence-based practice and some of the ambiguity may be resolved. For example, Jensen and colleagues (2005) have suggested a future research agenda that is not limited to the implementation of a randomized controlled trial but would compare treatment interventions, identify the active ingredient of what is considered to be an evidence-based practice, and identify mediating variables that may affect effectiveness. Their methodology aims to uncover the "cause" of the positive effect in unequivocal terms so as to facilitate dissemination and implementation that can go to scale. In addition, it is important to evaluate the effects of evidence-based practices from a longitudinal perspective, examining both the short term and long term outcomes for possible iatrogenic effects of interventions (Dishion, McCord, & Poulin, 1999).

As the research base grows, it can be expected that methods and designs will become even more sophisticated in evaluating evidence-based practice and some of the ambiguity may be resolved.

An Overview of Programs Designated as Empirically-Based

Description of empirically-based programs. A primary purpose of our review was to discover what the current evidence base looks like; that is, was there a concordance of programs across listings? The answer is "yes" and "no." Of the 92 programs listed in Table 4.9, the majority are from SAMHSA (*n* = 56, 61%), and 21 programs (23%) appear in more than one of the five sources. It is important to note that should some programs be listed by fewer sources than others, this is often a reflection of the different requirements each source has for being "empirically-based" versus a real difference in the programs. An examination of the programs listed in Table 4.9 reveals that approximately one-third of the programs listed are designated as targeting substance abuse, trauma, or health problems, while the remaining two-thirds address the regulation of emotions or social functioning, see Table 4.10. Overall, program approaches focus equally on universal levels of prevention (53% or 48 of 90 programs) and selective/indicated levels of prevention (47% or 42 of 90 programs). Two programs were categorized as focusing on all three levels of prevention.

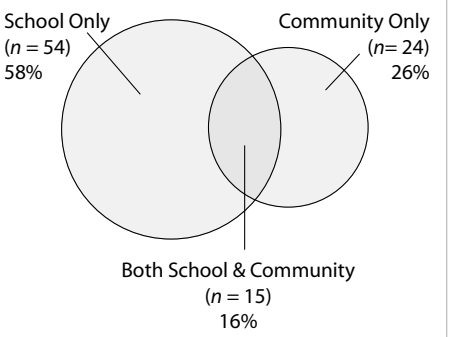
The majority of the programs (58%) listed in Table 4.9 take place in schools, while 26% take place solely in the community, and 16% take place in both the community and schools. It is clear that any discussion of school-based mental health services must include the role of evidence-based programs.

Thirty-five percent of the programs target children 12 years of age or younger, while 24% target children 12 years of age or over. The remaining programs target children covering a wide range of ages including 20% that serve youth 5 to 18 years of age and an additional 16% that serve youth 10 to 18 years of age.

A majority of evidence-based mental health programs (61%) have a family component as part of the program, while a little less than half

figure 4.2

Settings for Evidence-based Programs and Practices (*N* = 92)



(47%) have a teacher component. The duration of programs listed in Table 4.9 is equally divided with a third of the programs taking less than three months to implement, a third taking between three and nine months to be implemented, while the remaining third require more than nine months for full implementation.

The results found in this investigation are similar to a parallel endeavor to isolate evidence-based practices in schools by the School Psychology Task Force of the American Psychological Association (Kratochwill & Stoiber, 2002). In their analysis of evidence-based practices promoted across various organizations, they identified a total of 29 programs that were school-based and showed clear evidence of effectiveness through rigorous testing. Eleven of these programs focused on comprehensive prevention, nine focused on violence (prevention and intervention), eight focused on substance abuse, five focused on social skills and emotional adjustment, two focused on academics, and one program focused on trauma (Hoagwood, 2006).

table 4.9

Compendium of Evidence-Based Behavioral Health Programs Listed on any of Five Sources by Prevention Level (Indicated, Selective, and Universal).

	Prevention Level / Focus	List Cited	School, Community, or Both	Age Range*	Length of Program+	Family Component (Y/N)	Teacher Component (Y/N)
Indicated (17 programs)							
	Social / Emotional						
1	Brief Strategic Family Therapy	A	C	6 – 17 yrs	8 – 12 weeks	Y	N
2	Counselors Care (C-CARE) and Coping and Support Training (CAST)	B	S	14 -18 yrs	2 hours (C-CARE) 6 weeks (CAST)	N	N
3	Early Risers: Skills for Success	A	B	6 – 10 yrs	3 years	Y	N
4	Family Effectiveness Training	A	C	6 – 12 yrs	13 weeks	Y	N
5	Multidimensional Treatment Foster Care	C, D	B	12 -18 yrs	Avg. stay 7 months	Y	N
6	Queensland Early Intervention and Prevention of Anxiety Project	B	S	7-14 yrs	10 weeks	Y	N
	Substance Abuse						
7	Multidimensional Family Therapy	A	C	11 – 18 yrs	Avg. of 4 months	Y	N
8	Not on Tobacco	A	B	12 – 24 yrs	10 weeks	N	N
9	Project EX	A	S	14 – 19 yrs	6 weeks	N	N
10	Reconnecting Youth	A	S	14 – 18 yrs	One semester	Y	Y
	Violence / Aggression						
11	Adolescent Transitions Program (ATP)	B	C	10 – 14 yrs	12 weeks	Y	N
12	Anger Coping Program	B	S	9 – 12 yrs	12 – 18 weeks	N	N
13	Attributional Intervention (Brainpower Program)	B	S	10 – 12 yrs	6 weeks	N	N

	Prevention Level / Focus	List Cited	School, Community, or Both	Age Range*	Length of Program+	Family Component (Y/N)	Teacher Component (Y/N)
14	Earlscourt Social Skills Group Program	B	S	6 – 12 yrs	12 – 15 weeks	Y	Y
15	Montreal Longitudinal Experimental Study	B	B	7 – 9 yrs	Two years	Y	N
16	Multisystemic Therapy (MST)	A, C	C	12 – 17 yrs	Avg. of 4 months	Y	N
17	Peer Coping Skills Training	B	S	6 – 12 yrs	Approx. 22 weeks	N	Y
Indicated / Selective (11 programs)							
	Social / Emotional						
18	Incredible Years	A, C	S	2 – 8 yrs	Up to 22 weeks	Y	Y
19	Families and Schools Together (FAST)	A	C	4 – 12 yrs	8 – 12 weeks	Y	N
	Substance Abuse						
20	CASASTART (Striving Together to Achieve Rewarding Tomorrows)	A, D	C	8 – 13 yrs	Up to 2 years	Y	N
21	Leadership and Resiliency Program (LRP)	A	B	14 – 17 yrs	Up to 4 years	N	N
22	Parenting Wisely	A	C	9 – 18 yrs	Self-administered	Y	N
23	Project Success	A	C	14 – 18 yrs	8 – 12 sessions	Y	N
24	Residential Student Assistance Program	A	C	14 – 17 yrs	5 – 24 weeks	N	N
	Violence / Aggression						
25	FAST Track	B	S	6 – 12 yrs	School Year	Y	N
	Trauma						
26	Cognitive Behavioral Therapy for Child Sexual Abuse	A	C	3 – 18 yrs	12 sessions	Y	N
27	Trauma Focused Cognitive Behavior Therapy	A	C	3 – 18 yrs	12 - 16 weeks	Y	N
	Healthy Babies						
28	Nurse-Family Partnership Program	A, C	C	0 – 3 yrs	Up to 2 years	Y	N
Selective (14 programs)							
	Social / Emotional						
29	Across Ages	A	B	9 – 13 yrs	Continuous	Y	N
30	PENN Prevention Program	B	C	10 – 13 yrs	12 weeks	N	N
31	Primary Mental Health Project	B	S	4 – 10 yrs	School Year	N	N
32	Stress Inoculation Training I	B	S	16 – 18 yrs	13 sessions	N	N
33	Stress Inoculation Training II	B	S	13 – 18 yrs	8 sessions	N	N
	Aggression / Depression						
34	Coping with Stress Course	B	S	13 – 18 yrs	15 sessions	N	N
35	First Step to Success	B	B	4 – 5 yrs	Approx. 3 months	Y	Y
36	Functional Family Therapy	C	C	11 – 18 yrs	8 – 26 hours	Y	N
37	Social Relations Program	B	S	10 – 11 yrs	School Year	N	N
	Trauma						
38	Children in the Middle	A	C	3 – 12 yrs	2 – 4 months	Y	N
39	Children of Divorce Intervention Program (CODIP)	B	S	8 – 15 yrs	9 – 16 sessions	N	N
40	Children of Divorce Parenting Program	B	C	8 – 15 yrs	12 sessions	Y	N
41	Family Bereavement Program	B	C	7 – 17 yrs	15 sessions	Y	N

	Prevention Level / Focus	List Cited	School, Community, or Both	Age Range*	Length of Program+	Family Component (Y/N)	Teacher Component (Y/N)
	Mentoring						
42	Big Brothers/Big Sisters	B, C	C	5 – 18 yrs	One year or longer	N	N
Selective /Universal (9 programs)							
	Social / Emotional						
43	Dare to be You1	A	B	2 – 5 yrs	12 weeks and boosters	Y	Y
44	Project Achieve	A	S	4 – 14 yrs	3 years	Y	Y
45	SAFE Children: Schools and Families Educating Children	A	B	4 – 6 yrs	20 weeks	Y	N
46	Strengthening Families Program	A	C	6 – 12 yrs	7-14 weeks and boosters	Y	N
	Substance Abuse						
47	All Stars	A	B	11 – 14 yrs	9 – 13 weeks	Y	Y
48	Keepin' It REAL	A	S	10 – 17 yrs	10 lessons and booster	N	Y
49	Project ALERT	A, D	S	11 – 14 yrs	11 weeks and boosters	N	Y
50	Project Toward No Drug Abuse	A, C	S	14 – 19 yrs	4 – 6 weeks	N	Y
	Aggression						
51	Olweus Bullying Prevention Program	A, C	S	6 – 18 yrs	School Year	N	Y
Universal (39 programs)							
	Social / Emotional						
52	Al's Pals: Kids Making Healthy Choices	A	B	3 – 8 yrs	23 weeks	Y	Y
53	Caring School Community	E	S	5 – 12 yrs	School Year	Y	Y
54	Child Development Project	A, B	S	5 – 12 yrs	Up to 3 years	Y	Y
55	Families that Care: Guiding Good Choices	A	C	8 – 13 yrs	5 – 10 weeks	Y	N
56	Good Behavior Game	B	S	5 - 7 yrs	2 years	N	Y
57	High/Scope Educational Approach for Pre-School & Primary Grades	A, E	S	3 – 5 yrs	School Year	Y	Y
58	Improving Social Awareness – Social Problem Solving	B	S	8 – 14 yrs	School Year	N	Y
59	Life Skills Training	A, C, D, E	S	11 – 16 yrs	3 years	N	Y
60	Linking the Interests of Families and Teachers (LIFT)	B	S	6 – 11 yrs	10 weeks	Y	Y
61	Lions Quest Skills Series	A, E	S	6 - 18 yrs	Multiyear	Y	N
62	PATHS: Promoting Alternative Thinking Strategies	A, B, C, E	S	5 – 12 yrs	5 years	Y	Y
63	Positive Youth Development Program	B	S	11 – 14 yrs	15 weeks	N	N
64	School Transitional Environment Project (STEP)	B	S	Transitioning students	School Year	N	Y
65	Seattle Social Development Project	B	S	6 - 12 yrs	School Year	Y	Y
66	Skills, Opportunities, And Recognition (SOAR)	E	S	6 – 12 yrs	Multiyear	Y	Y
67	Social Decision Making and Problem Solving Program	E	S	6 – 12 yrs	25-40 lessons per year	N	Y
68	Suicide Prevention Program I	B	S	12 - 14 yrs	12 weeks	N	N
69	Suicide Prevention Program II	B	S	16 – 17 yrs	7 weeks	N	N

	Prevention Level / Focus	List Cited	School, Community, or Both	Age Range*	Length of Program+	Family Component (Y/N)	Teacher Component (Y/N)
	Substance Abuse						
70	Athletes Training and Learning to Avoid Steroids (ATLAS)	A, D	S	13 - 19 yrs	10 sessions	Y	Y
71	Class Action	A	S	14 – 18 yrs	8-10 weeks	Y	Y
72	Communities Mobilizing for Change on Alcohol	A	B	13 -20 yrs	Continuous	N	N
73	Family Matters	A	C	12 – 14 yrs	3 months	Y	N
74	Keep a Clear Mind	A	S	8 – 12 yrs	4 weeks	Y	Y
75	Midwestern Prevention Project	C	B	12 – 18 yrs	5 years	Y	Y
76	Project Northland	A, D	S	10 – 14 yrs	3 years	Y	Y
77	Project TNT: Towards No Tobacco Use	A, D	S	11 - 14 yrs	10 days and boosters	N	Y
78	Project Venture	A	B	11 - 15 yrs	Continuous	N	Y
79	Protecting You/Protecting Me	A	S	6 – 11 yrs	5 years	N	Y
80	Start Taking Alcohol Risks Seriously (STARS) for Families	A	B	11 – 14 yrs	5 – 10 weeks	Y	N
81	The Strengthening Families Program: For Parents and Youth	A, D	C	10 – 14 yrs	7 weeks and booster	Y	N
82	Too Good For Drugs	A	S	5 – 18 yrs	School year	Y	Y
	Aggression / Violence						
83	I Can Problem Solve (ICPS)	B, E	S	4 – 12 yrs	School Year	Y	Y
84	Responding in Peaceful and Positive Ways (RIPP)	A, B, E	S	12 – 14 yrs	3 years	N	Y
85	Safe Dates	A	S	12 – 18 yrs	9 sessions	Y	Y
86	Second Step: A Violence Prevention Program	A, B, E	S	4 – 14 yrs	15 to 30 weeks	Y	Y
87	SMART Team: Students Managing Anger and Resolution Together	A	S	11 – 15 yrs	8 computer modules	N	Y
88	Teaching Students to be Peacemakers	A	S	5 – 14 yrs	School Year	N	Y
89	Too Good for Violence	A	S	5 – 18 yrs	School Year	N	Y
	Health Promotion						
90	Know Your Body	E	S	6 – 12 yrs	School year	Y	Y
Universal/ Selective/Indicated (2 programs)							
91	Creating Lasting Family Connections (CLFC)	A	C	11 – 15 yrs	20 weeks	Y	N
92	Positive Action	A	S	5 – 18 yrs	School Year	Y	Y

1 This is a different program than D.A.R.E. (Drug Abuse Resistance Education)

* Programs reporting grades were converted to the approximate age of student in each grade level

+ Sessions generally last 40 minutes to 1 hour

Codes for which lists cited the program:

A = SAMHSA: http://www.modelprograms.samhsa.gov

B = Penn State: http://www.prevention.psu.edu/pubs/docs/CMHS.pdf

C = CSVP: http://www.colorado.edu/cspv/blueprints/

D = USDOE: http://www.ed.gov/admins/lead/safety/exemplary01/exemplary01.pdf

E = CASEL: http://www.casel.org/projects_products/safeandsound.php

Overall, the empirically-based programs contain a limited number of overall strategies and include either skill development curricula or therapeutic approaches of either behavior management or cognitive-behavioral therapy.

What does differ between programs is the amount of time, type of involvement, and role of teachers and parents in the program.

table 4.10

Target of problem behavior and level of prevention for the 92 programs that appear on one of the five lists of evidence-based programs.

Level of Prevention	All programs	Programs directed at substance abuse, trauma, or health problems	Programs directed at social functioning, emotional regulation, or reducing aggression
Indicated	17	4	13
Indicated/Selective	11	7	4
Selective	14	4	10
Selective/Universal	9 } 48	4	5
Universal	39 }	13 (37%)	26 (43%)
Indicated/Selective/ Universal	2	0	2
Total	92	32 (35%)	60(65%)

Content/focus of the programs listed as empirically-based. An examination of indicated prevention programs reveals that the majority address aggression and violence by promoting skill-building curricula for students, their parents, or both. On the other hand, those indicated programs that are targeted toward the regulation of social and emotional functioning contain skill-building curriculum and therapeutic approaches (either cognitive-behavioral or behavior management strategies) or a combination of both. As expected, as programs move toward more universal approaches to prevention, the use of skill-building curricula increases and the use of therapeutic approaches diminishes.

Overall, the empirically-based programs contain a limited number of overall strategies and include either skill development curricula or therapeutic approaches of either behavior management or cognitive-behavioral therapy. What does differ between programs, however, is the amount of time, type of involvement, and role of teachers and parents in the program. Universal prevention programs are more likely to involve parents and teachers in delivering and reinforcing the skills curriculum, and parents may also be recipients of skill-building curricula, such as parenting skills. As programs move to the selective and indicated levels of prevention, skill-building curricula are likely be delivered to a selected group of students, and involve parents in the therapeutic process or as providers of the skill-building curricula, or both. Another trend is that skill-building curricula are more likely to be delivered to children with externalizing problems (e.g., aggression or violence), while children with internalizing problems are more likely to receive cognitive-behavioral therapeutic strategies.

Limitations

The current analysis included only those programs ranked by each of five sources as either the most effective or most ready for dissemination. Most sources had several tiers of programs, and a more complete analysis would include all the programs listed by all sources. Additionally, the only program materials reviewed were those supplied by each of the five sources. A more complete analysis would include an inspection of the materials supplied by each individual program including an examination of original research articles describing the empirical support. Even with these limitations, however, the purpose of combining the diverse sources of information and summarizing the current evidence-base in school mental health services has been achieved.

Summary/ Discussion

It is evident that considerable efforts have been made by multiple organizations to make information about evidence-based programs available to practitioners and other consumers. We focused on seven organizations that have provided some type of information on evidence-based practices, representing approximately 100 programs aimed at preventing and treating substance abuse and emotional and social regulation problems.

The requirements used by each organization to determine the level of scientific rigor differed, ranging from requirement for multiple controlled trials to a consensus reached by an expert panel. Also, the organizational perspectives differed, affecting how programs were deemed eligible for inclusion on their lists. The CSPV focused on violence prevention, CASEL focused on programs that increase social and emotional competency, and WSIPP focused on outcomes (crime prevention, for example). These varied perspectives reveal the range of functioning expected to be influenced by our mental health programs. Some evidence-based programs can reduce symptomology associated with depression, for example, while others focus on functional outcomes, such as reducing arrest rates. It is likely that this diversity of goals—both in organizations that identify evidence-based programs, and in the programs they list—confuses the issue for many decision makers, and may impede adoption.

However, there appear to be trends in these mental health programs themselves that are considered evidence-based. School-based delivery is such a trend, as the majority of programs are designed to be operated by, or in conjunction with, schools and parents. This finding indicates that planning for school-based mental health services in the future will include determining the role of evidence-based programs, with members of local communities assessing whether a particular evidence-based program or strategy addresses the needs of the local population. The list of evidence-based programs

There appear to be trends in these mental health programs themselves that are considered evidence-based. School-based delivery is such a trend, as the majority of programs are designed to be operated by, or in conjunction with, schools and parents.

provided in Table 4.9 can serve as a planning tool for joint discussions between decision-makers in mental health and schools. The trend of school involvement in the delivery of empirically-supported programs appears to cut across the universal and selective/indicated levels of prevention with the role of parents and teachers changing as you move from universal to indicated programs. As schools and mental health organizations move to evidence-based programs, they should be prepared for new roles for teachers, parents, and mental health providers—new roles that are not always universally embraced or valued.

Two common active features within the pool of evidence-based treatments are (a) skills-training using multiple modes of delivery and (b) therapy, including some form of cognitive-behavioral therapy or behavior management strategies, with many programs using both.

All the programs listed as evidence-based can be considered packages that contain the information regarding the resources and training necessary to implement the program. While compendia of programs may be useful because they list a variety of programs in one place, each program should be reviewed to ensure that the problems and populations addressed match the needs of the local population where implementation is planned. Chorpita and his colleagues (Chorpita, Daleiden, & Weisz, 2005; Chorpita & Taylor, 2001; Chorpita et al., 2002; Daleiden & Chorpita 2005) described how members of a local community reviewed the evidence-base of various mental health interventions in order to make recommendations to support clinical decisions. Through the work of a task force of key stakeholders including administrators, academics, parents of children with emotional disturbances, and clinical service providers, the evidence-base was condensed to one-page summaries for each commonly encountered mental health problem in children. These summaries provided a roadmap to the efficacy level of various services. In addition to these summaries, the service research information was incorporated into interagency performance standards and practice guidelines.

Two common active features within the pool of evidence-based treatments are (a) skills-training using multiple modes of delivery and (b) therapy, including some form of cognitive-behavioral therapy or behavior management strategies, with many programs using both. It is also important to note what is not listed as being evidence-based at this time. Social skills curriculums, a popular adjunct intervention delivered in schools to youth with emotional and behavioral disorders, has not been found to be effective in influencing social functioning in this population. The evidence on social skills training is still being developed, and it should be considered an experimental intervention that requires further investigation and specification (Kavale, Mathur, & Mostert, 2004).

Neither Systems of Care (Stroul & Friedman, 1994) nor Positive Behavior Support (Horner et al., 1999)—two initiatives extensively supported by federal funding—were listed on any of the sources as being evidence-based. Both approaches target outcomes for systems, rather than individuals, per se, and suggest frameworks, principles, or strategies for

schools or communities to implement in accordance with their unique needs. Consequently, neither of these initiatives has resulted in packages that communities or schools can readily implement. As lists of evidence-based programs evolve from programs focused solely on the individual to programs that focus on outcomes at the population, policy, and system levels (as SAMHSA is currently promoting), we expect that these types of strategies will begin to appear.

Because most evidence-based programs call for new roles for mental health providers, parents, and teachers, it has become clear that parents and teachers may be the primary gate keepers to implementation of evidence-based programs (Han & Weiss, 2005). In light of these new roles, there appears to be the need for an integrative framework to help communities and schools work together to successfully implement universal, selective, and indicated prevention and treatment strategies. The models discussed in the previous chapter offer a conceptual model for how integrated systems of services and supports should work; it may be that Systems of Care and Positive Behavior Support may serve as the beginning of such frameworks.

There appears to be the need for an integrative framework to help communities and schools work together to successfully implement universal, selective, and indicated prevention and treatment strategies.