

# **Best Practices in Children's Mental Health**

A Series of Reports Summarizing the Empirical Research and other Pertinent Literature  
on Selected Topics

## **Report # 18**

### **School-Based Mental Health**

*A Review of the National Literature*  
**February, 2007**

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**Best Practices in School-Based Mental Health**  
***A Review of the National Literature***

**Executive Summary**

While, to date, no clear best practice model for school-based mental health (SBMH) programs has been established (Paternite, 2005), the evidence base for the effectiveness of SBMH programs is slowly gaining robustness (Schaeffer, Bruns, Weist, Stephan, Goldstein, & Simpson, 2005; Rones & Hoagwood, 2000). There is growing evidence that SBMH programs can be similarly effective as clinic-based services (Armbruster, 1999), and can have a positive impact on individual students' attendance, behavioral, and academic functioning, as well as on the system-level through, for instance, enhancing access to and utilization of mental health services (Hunter, 2004), and reducing unwarranted referrals to special education services etc. (Bruns, Walrath, Glass-Siegel, & Weist, 2004). In addition, ten principles of best practice have been suggested (see p.11) (Weist, Sander, Walrath, Link, Nabors, Adelsheim, Moore, Jennings, & Carrillo, 2005). Yet, the diversity of existing programs and definitions complicates efforts to determine which services, or service components, are most effective for which type of problem or student. Other questions concern the transfer and sustainability of programs: how can programs deemed effective in clinic-based research programs or in special demonstration projects be implemented in school settings, and how can programs be sustained in everyday school systems? (Bruns et al., 2005; Schaeffer et al., 2005; Owens & Murphy, 2004; Ringeisen et al., 2003).

Programs deemed effective have a theory of change around which the program is designed and implemented, and most often use a cognitive-behavioral, skill building approach. They focus on risk and protective factors in individuals, families, and the social environment including classrooms, schools, districts, and communities (Graczyk, Domitrovich, & Zins, 2003). At the same time, there is still insufficient data to establish that outcomes generalize across settings and time (Weist, 1999), and only limited attention has been granted to issues of parent involvement, client satisfaction, and how programs could attend more effectively to issues such as gender, culture and ethnicity, and different age groups.

**Targeted outcomes** in SBMH programs ideally include one or more of the following domains:

- academic functioning (e.g. improving or passing grades, reduction in drop out)
- social functioning (e.g. reduction of peer problems, increase of social skills, reduction of out-of-school suspensions)
- symptom reduction (e.g. reduced aggression, disruption, anxiety, depression, etc.)

- systems change (e.g. reduction of SpEd referrals, SpEd placements)

**Interventions that have shown empirical effectiveness** include a combination of

- cognitive behavioral treatment approaches;
- skill building (e.g. problem-solving, social skills)
- parent involvement
- teacher involvement
- teacher training
- consultation for teachers.

In addition, and recognizing current gaps in the literature, authors recommend that programs

- are designed to fit students' cultural background, gender and developmental age,
- include strategies to increase student satisfaction,
- involve peers,
- and consider how parents, teachers, the school, and other social environments could be utilized to enhance the generalization of treatment effects.

**Students with serious emotional or behavioral disorders** also benefit from SBMH programs, although many youth in this group are likely to continue to experience a high level of difficulties in their social and academic functioning. To maximize effectiveness for this population (Reddy & Richardson, 2006; Greenberg, Domitrovich & Bumbarger, 2000), it is recommended that programs

- provide comprehensive approaches for assessment and intervention that target multiple domains (i.e., academic, behavior, and social competencies),
- use psychometrically sound and clinically sensitive outcome assessment instruments,
- focus on quantifiable behavioral goals and well-defined treatment components,
- provide intensive skill-based parent and teacher training,
- offer home and school contingency management plans along with intensive case management,
- utilize parents, teachers, and peers as agents of therapeutic change,
- include varied treatment agents (e.g., regular and special education teachers, teacher aides, parents, school psychologists, social workers),
- use different treatment settings (e.g., regular education classrooms, self-contained classrooms, lunch/recess, after school programs, home, neighborhood, and community agencies), and
- offer longer-term supports.

**Implementing and sustaining** SBMH services beyond demonstration or research conditions has been identified as a common problem (Han & Weiss, 2005; Lewis & Newcomer, 2002; Rones & Hoagwood, 2000; Weist, 1999) which can be addressed through features such as

- maximizing the “goodness of fit” of interventions with natural routines of the setting, through consistency with the values and skills of people at the school, and by producing reinforcing short-term results;
- addressing consent and confidentiality early;
- enhancing acceptability of the program for schools and teachers;
- feasibility of running the program on an ongoing basis with minimal but sufficient resources;
- consistency of program implementation;
- ongoing inclusion of parents and teachers;
- integration of program content into general classroom curriculum;
- flexibility and adaptability;
- strategies for generalization.

Recognizing the importance of SBMH, at least four states (Illinois, Kentucky, Idaho, and South Carolina) have initiated and funded statewide SBMH programs (see p.23). This report concludes with strategies for funding SBMH services (see p.32).

## Introduction

Initiatives to provide mental health services in schools have grown substantially in recent years (Foster et al., 2005). Recognizing that the mental health needs of many young people remain undetected and/or unserved (U.S. Public Health Service, 2000), mental health initiatives in schools set out to increase access to and utilization of services (Hunter, 2004). Based on the assumption that schools are second only to families in their impact on the development children and adolescents (Evans, 1999), school-based services have been developed to provide early intervention, crisis response, prevention, treatment, as well as to promote the social and emotional well-being of students overall (Taylor & Adelman, 2004).

To date, no clear best practice model has been established (Paternite, 2005) but the evidence base for the effectiveness school-based mental health programs is slowly growing and gaining robustness (Schaeffer, Bruns, Weist, Stephan, Goldstein, & Simpson, 2005; Ronen & Hoagwood, 2000). In addition, ten principles of best practice have been suggested (Weist, Sander, Walrath, Link, Nabors, Adelsheim, Moore, Jennings, & Carrillo, 2005; see details below). There is some evidence that school-based mental health programs can be similarly effective as clinic-based services (Armburster, 1999) and can have a positive impact on individual students' attendance, behavioral, and academic functioning, as well as on the system-level through, for instance, a reduction of unwarranted referrals to special education services etc. (Bruns, Walrath, Glass-Siegel, & Weist, 2004). Yet, the diversity of existing programs and definitions complicates efforts to determine which services, or service components, are most effective for which type of problem or student. Efforts to establish effective programs have been put forth by the fields of education and mental health alike, however, collaboration between fields continues to be hampered by diverging theoretical perspectives, professional languages, and policies (Kutash, et al. 2006). Other questions raised in current literature concern the transfer and sustainability of programs: how can programs deemed effective in clinic-based research programs or in special demonstration projects be implemented in school settings, and how can programs be sustained in everyday school systems? (Bruns et al., 2005; Schaeffer et al., 2005; Owens & Murphy, 2004; Ringeisen et al., 2003).

Based on a review of the national literature, the following report outlines the current state of knowledge. A variety of relevant databases (PsycInfo, PubMed, Social Work Abstracts, Exceptional Children, ERIC) as well as internet sources, and reference lists were searched to

identify studies, meta-analyses, or reviews published between 1996 and 2006 which illuminate the question which practices can be considered “best” at the current time.

## Overview of Mental Health Services in Schools

### Definitions

**School-Based Mental Health (SBMH)** is a broad term used in this report to describe programs and models which provide mental health services delivered in or through schools, staffed through schools or outside agencies, and which reach beyond standard assessment services of school psychologists for students in need of special education (SpEd). SBMH services may be of different intensity and may include prevention as well as intervention/treatment models. They can include individual, or group approaches aimed at students with high needs, those deemed at-risk, or be delivered to all students with and without special needs.

In the literature, a variety of terms describe different models and concepts of SBMH programs:

**Full-Service Community Schools** (Dryfoos, 1994; Robinson, 2002) represent perhaps the most comprehensive approach. Based on the premise that schools reach a high number of families in a given community and can be accessed easily, full-service community schools co-locate a full range of social and health services at schools including mental health programs. Full-service community schools serve as a hub for services to all members--young and old--in the community (Robertson et al., 2004). Akin to efforts that promote a Systems of Care approach in the mental health field, full-service community schools share a philosophy to maximize community collaboration and use various resources creatively (Dryfoos, 1998).

**School-Based Health Centers** provide health (but not social) services on school grounds. The Substance Abuse and Mental Health Services Administration (SAMHSA) defines the model as a health center on school property where students enrolled at the school can receive primary health care, including diagnostic and treatment services (SAMHSA, Mental Health Dictionary, <http://mentalhealth.samhsa.gov/resources/dictionary>). These services are usually provided by a nurse practitioner or physician’s assistant. According to the National Assembly on School-Based Healthcare, on-site school-based health centers exist in only 1,700 schools nationwide (Foster et al., 2005).

**Expanded School Mental Health Programs (ESMH)** is a term coined by the Center for School Mental Health Analysis and Action (formerly known as the Center for School Mental Health Assistance) at the University of Maryland. ESMH programs describe school-community partnerships that augment the often limited services for youth in special education toward a full continuum of mental health services for students in general and special education (Schaeffer, Bruns, Weist, Stephan, Goldstein, & Simpson, 2005). Mark Weist, Director of the Center, defined the term “expanded school mental health” at a Congressional Briefing as follows:

We use the term "expanded school mental health" (ESMH) to describe programs that deliver a range of services (prevention, assessment, treatment, case management) to youth in both general and special education, with strong collaboration between schools and community mental health agencies. ESMH is not a model, but a framework that reflects what we believe includes core elements of effective mental health programs in schools. "Expanded" conveys that we are building on programs and services that exist in almost all schools; for example, reflecting the work of school psychologists, social workers, counselors, and other pupil services, teaching and school health staff. ESMH programs augment the work of these staff, and reflect an effort by the school to fill in gaps and improve services in a collaborative and interdisciplinary team effort. (June 6, 2001; Congressional Briefing "School Health in the New Millennium: Focus on Mental Health for Children and Adolescents," sponsored by the Friends of School Health; full text available online at <http://www.apa.org/ppo/issues/pweist601.html>)

In contrast, SAMHSA's definition of **School Based Services** is limited to those school-based treatment and support interventions which target students with emotional or behavioral disturbances. Such services are designed to identify emotional disturbances and/or assist parents, teachers, and counselors in developing comprehensive strategies for addressing these disturbances. School-based services include counseling or other school-based programs for emotionally disturbed children, adolescents, and their families delivered within the school, home and community environment (Foster et al, 2005).

**School-linked mental health programs** is a term describing services in which off-site professionals provide services to students. Fifty-nine percent of school districts have arrangements for school-linked mental health services according to the *School Health Policy and Programs Study 2000* (Brenner, Martindale, & Weist, 2001).

## Guiding Frameworks

**Three Tiers of Intervention/Prevention.** Aside from the above mentioned ESMH framework, SBMH programs are frequently categorized into three tiers, namely universal, selected, and targeted approaches. Although there is some diversity in conceptual definitions (Kutash et al., 2006) the three tiers of services correspond roughly to the three tiers of primary, secondary and tertiary prevention used in the field of public health (Kratchowill et al., 2004). According to various authors, adopting a **public health framework** allows for a better understanding of how preventive services can be described in the SBMH context and for ways to promote mental health in schools through advancing training, quality assessment and improvement, using empirically supported practices, and advocacy efforts (Kutash et al., 2006; Weist, 2005). Universal programs (primary prevention) consist of school-wide services that are delivered independent of needs testing; universal programs are estimated to be effective for about 80% of students (Kratchowill et al., 2004). Selected interventions (secondary prevention) specifically aim at groups of students identified as “at-risk,” and who remain unresponsive to universal measures (an estimated additional 10%-15% of students). Finally, targeted interventions (tertiary prevention) are geared to serve an additional one to five percent of students whose needs surpass universal and selected approaches. Targeted programs tend to offer more intensive, comprehensive, and longer-term interventions aimed at students frequently identified as having serious behavioral or emotional disorders (Kratchowill et al., 2004). Selected and targeted approaches are sometimes also referred to as “indicated” programs (Rones & Hoagwood, 2000).

Taylor and Adelman (2004) outline a conceptual framework for a comprehensive, multifaceted and integrated approach that brings together the resources in schools and communities. Underscoring the need for a broad and diverse perspective to mental health in schools, Taylor and Adelman suggest that SBMH programs are best embedded in a larger systemic effort to address barriers to learning and enhance healthy development. The authors further emphasize moving from a problem-focus to an “enabling” focus that includes classroom strategies to support learning (such as individualized supports), linking families with community resources, crisis assistance, and prevention, supporting transitions for students who move to or from schools, changes grades etc., supporting the needs and learning of adults in the home and mobilizing other resources, as well as community outreach to involve and support school staff and families. A network of schools around the country are involved in implementing this framework, yet outcomes have not yet been reported in the literature (Kutash et al., 2006). (Details for the Taylor and Adelman framework and guidelines are

available from the National Center for Mental Health in Schools at UCLA, Box 951563, Los Angeles, CA. 90095-1563; website: <http://smhp.psych.ucla.edu>).

### **Delivery Mechanisms**

Five (not mutually exclusive) mechanisms for the provision of school mental health services have been identified (Foster et al., 2005):

- 1) *School-financed student support services*, in which school districts hire professional staff to provide traditional mental health services. Foster et al. (2005) found this to be the most common mechanism;
- 2) *Formal connections with community mental health services*, in which one or more community agencies provide mental health services at the school or the community agency. Such connections, most often with county or community mental health agencies, were present in over 50% of schools (Foster et al., 2005);
- 3) *School-district mental health units or school-based health clinics with mental health services*, in which districts operate and finance their own mental health units or clinics. Foster et al. (2005) found that only 17% of schools nationwide had such units or SBMH centers with mental health services, more often in middle schools (23%) than elementary schools (16%) or high schools (14%), and more prevalent in urban schools (22%) than in suburban or rural schools (each 15%);
- 4) *Classroom-based curricula* are activity-driven, preventative approaches usually led by teachers and attempt to maximize learning through enhanced social and emotional growth;
- 5) *Comprehensive and integrated approaches*, in which districts bring multiple partners (e.g. community-based organizations) together to provide a full spectrum of services for children and youth with mental health needs. Such approaches include models like Systems of Care with an array of mental health and school-based wraparound services, as well as Full Service Community Schools (Foster et al., 2005; Armstrong, Robbins, Collins, & Eber, 2004; Eber, Sugai, Smith, & Scott, 2002; Dryfoos, 1994).

While some level of mental health services are provided in most schools, personnel to oversee and coordinate such services is most often available on the school and district levels rather than on the state level. As results from the School Health Policy and Programs Study 2000 (Brener, Martindale & Weist, 2001) show, 78% percent of schools and 63% of school districts had a person to coordinate or oversee programs, but only 51% percent of states had

such a person on the state level, and very few states and districts had requirements regarding the staff-student ratios (Brener, Martindale & Weist, 2001).

### **National Survey**

The most complete overview of mental health services in schools to date is provided by a National Survey of SAMHSA (Foster, Rollefson, Doksum, Noonan, Robinson, & Teich, 2005). The study collected data from a representative sample of the approximately 83,000 public elementary, middle, and high schools and their associated school districts. Main findings include:

- 73% of the schools reported that “social, interpersonal, or family problems” were the most frequent mental health problems for both male and female students;
- for boys, aggression or disruptive behavior and behavior problems associated with neurological disorders were the second and third most frequent problems whereas for girls anxiety and adjustment were listed;
- in the vast majority of schools (87%), all students, not just those in special education, were eligible to receive mental health services;
- one fifth of students had received some type of school-supported mental health services in the school year prior to the study;
- almost all schools reported having at least one staff member (most commonly school counselors, followed by nurses, school psychologists, and social workers) whose responsibilities included providing mental health services to students;
- school nurses spent about a third of their time providing mental health services;
- more than 80% of schools provided mental health assessments, behavior management consultation, and crisis intervention, as well as referrals to specialized programs, (most often provided individual and group counseling and case management);
- the most frequently cited barriers to providing mental health services were financial constraints of families and inadequate school resources;
- 49% of schools used contracts or other formal agreements with community-based individuals and/or organizations to provide mental health services to students (most frequently county mental health agencies);
- the most common funding sources were the Individuals with Disabilities Education Act (IDEA), state special education funds, and local funds;
- in 28% of districts, Medicaid was among the top five funding sources;

- over two thirds of districts reported that the need for mental health services increased since the beginning of the 2000–2001 school year;
- 60% of districts reported that since the previous year, referrals to community-based providers had increased;
- one third of districts reported that the availability of outside providers to deliver services to students had decreased.

(Foster, et al., 2005)

### **Access and Utilization**

More and more young people access mental health services through school systems (Costello et al., 1996; Slade, 2002) and authors suggest that convenience of access is the strongest factor for higher utilization of school-based mental health services than traditional clinic- and community-based services (Evans, 1999). A study exploring data from the National Longitudinal Study of Adolescent Health (Slade, 2002) found that schools which offer on-site services modestly but significantly increased the probability of students using mental health counseling services at schools. The presence of school-based services had, on the other hand, no significant impact on the use of off-site mental health services. Only few students (mostly special education and minority students) used both school and non-school mental health services leading the author to conclude that school-based and other mental health services essentially run parallel without much overlap (Slade, 2002). On-site counseling services were available to approximately three out of every five adolescents who attended school. The availability of services was generally higher for minority groups (Latino, African-American, or Asian) than for white students. An exception were Native American youth who were less likely to have mental health counseling available at school. Access to available school-based counseling did not differ significantly by race (Slade, 2002).

A study by Weist et al. (1999) compared the psychosocial characteristics of clients seen in SBMH programs to those of young people served at community mental health centers. Authors found no significant differences in terms of life stress, exposure to violence, family support, self-concept and emotional and behavioral disturbance. It appeared, however, that children with predominantly internalizing symptoms of depression or anxiety were more likely to be served in SBMH programs than in community mental health centers. This finding underscored the importance of SBMH programs to reach young people who would otherwise not receive mental health services (Hunter, 2004) and points to the need to identify programs specifically effective for internalizing conditions.

### **Toward Identifying Best Practices**

One of the steps toward identifying best practices for SBMH was undertaken through a survey study that identified ten principles (Weist, Sander, Walrath, Link, Nabors, Adelsheim, Moore, Jennings, & Carrillo, 2005). These principles were initially derived from literature and existing guidelines, such as the Child and Adolescent Service System Program (CASSP) and the National Assembly of School-Based Health Care, and presented to school mental health professionals who rated them as to their importance. All principles were rated as important (5.1 and higher on a six point scale).

#### ***Ten Principles of Best Practice in School Based Mental Health***

*developed by the Center for School Mental Health Analysis and Action,  
a technical assistance center co-funded by SAMHSA at the University of Maryland  
(Weist, Sander, Walrath, Link, Nabors, Adelsheim, Moore, Jennings, & Carrillo, 2005, p. 9)*

1. All youth and families are able to access appropriate care regardless of their ability to pay.
2. Programs are implemented to address needs and strengthen assets for students, families, schools, and communities.
3. Programs and services focus on reducing barriers to development and learning, are student and family friendly, and are based on evidence of positive impact.
4. Students, families, teachers and other important groups are actively involved in the program's development, oversight, evaluation, and continuous improvement.
5. Quality assessment and improvement activities continually guide and provide feedback to the program.
6. A continuum of care is provided, including school-wide mental health promotion, early intervention, and treatment.
7. Staff hold to high ethical standards, are committed to children, adolescents, and families, and display an energetic, flexible, responsive, and proactive style in delivering services.
8. Staff are respectful of, and competently address developmental, cultural, and personal differences among students, families and staff.
9. Staff build and maintain strong relationships with other mental health and health providers and educators in the school, and a theme of interdisciplinary collaboration characterizes all efforts.
10. Mental health programs in the school are coordinated with related programs in other community settings.

## Effectiveness

An increasingly robust evidence base suggests that SBMH programs can be effective in reducing difficult behaviors and increasing social and academic functioning similar to clinic-based programs (Rones & Hoagwood; Crisp, Gudmundsen & Shirk, 2006). Still, the wide diversity of SBMH programs and targeted outcomes makes it difficult to establish which programs are most effective for which outcome and population. Research studies are often limited by methodological difficulties such as small samples, lack of long-term follow up data, and a lack of randomized control groups (Hunter, 2004; Hoagwood & Erwin, 1997). Thus, findings about the effectiveness of SBMH programs should be considered in light of gaps and limitations in the knowledge and research base concerning, for instance, the role of parent involvement, client satisfaction, and issues of cultural and gender diversity.

Literature selected for this best practices review included publications about school-based mental health programs aiming to improve mental health outcomes for youth, especially those displaying internalizing and/or externalizing behaviors. Excluded were publications on school-based programs that focused exclusively on very specific problems such as substance abuse, disaster response, or suicide prevention. Selected publications encompass (1) meta-analyses, or systematic reviews of empirical literature that offered clear descriptions for inclusion/exclusion of studies; (2) quantitative studies with experimental or quasi-experimental designs or qualitative studies with sufficient methodological trustworthiness. Also reviewed were (3) conceptual publications that offered relevant frameworks, models, or insights to guide effective practice in SBMH toward more sustainable, culturally or gender appropriate, or family-centered approaches, as well as (4) publications put forth by national technical assistance centers, namely the Center for School Mental Health Analysis and Action at the University of Maryland Baltimore, and the School Mental Health Project at the University of California Los Angeles, both funded by the Health Resources and Services Administration, with co-funding from the Substance Abuse and Mental Health Services Administration (SAMHSA).

The following section organizes current literature roughly according to the type of problem, namely externalizing or internalizing problems, programs sought to address.

*Externalizing Problems* include disruptive or aggressive behaviors associated with psychiatric symptoms and diagnoses such as Attention Deficit Disorders (ADD/ADHD), Conduct Disorder (CD), or Oppositional Defiant Disorder (ODD). *Internalizing Problems* include behaviors associated with psychiatric symptoms of anxiety or depression. Meta-analyses and reviews

are summarized first, followed by summaries of single studies roughly clustered according to similarities in targeted outcome (for instance, seeking to reduce out-of-school suspensions) and in order of methodological rigor (i.e. experimental studies first, followed by quasi-experimental studies). Articles describing full-service community schools, and those which describe outcomes of statewide initiatives are discussed in subsequent sections.

See Appendix C for summary table of empirical studies, listed alphabetically by author.

### ***Focus on Internalizing and Externalizing Problems***

A review by Greenberg, Domitrovich and Bumbarger (2000) analyzed 34 studies of prevention programs targeting children (ages 5 to 18) who showed early problems or signs for being at high-risk for later disorders. Despite methodological limitations of studies, programs were found to significantly reduce aggression, depression and anxiety and improve behavior and problem-solving skills. The review also found ten programs that successfully reduced the risk for conduct problems. Characteristics shared by effective programs included a universal approach that targeted children, families and teachers, a focus on teaching emotional self-regulation as well as thinking and decision-making skills to improve social and emotional competence. Programs effective in reducing depression and anxiety symptoms focused on teaching children and youth how to alter and utilize more effective thinking and behavioral coping strategies, such as eliciting support in times of stress. Effective programs created changes in the school and family ecology that supported the use and reinforcement of these new skills. The authors found that short-term interventions produced only time-limited benefits while multi-year programs were more likely to result in enduring benefits. Authors recommend ongoing intervention starting in the preschool and early elementary years aimed at multiple domains such as changing institutions and environments as well as individuals. Since no single program component seems sufficient to prevent multiple high-risk behaviors, a package of coordinated, collaborative strategies and programs is required in each community with the school environment as a central focus of intervention

In contrast to Greenberg's sole focus on preventative programs, a review by Rones and Hoagwood (2000) presents findings for interventions for youth already identified as displaying Emotional and Behavioral Disorders (EBD), depression, conduct problems, stress, and substance use. The authors found a robust group of SBMH programs that evidenced an impact across a variety of emotional and behavioral problems in children. The strongest evidence of impact was associated with programs attempting to change specific behaviors and skills, which may in part be a function of the predominance of cognitive-behavioral treatments

(CBT) and social skills approaches. At the same time, authors identified relatively few studies that targeted particular clinical syndromes most prevalent in students (such as ADHD, anxiety, depression etc.). These findings still hold true even though several studies of SBMH programs targeting anxiety and depression have since been published and are reviewed in more detail below.

Hoagwood and Erwin (1997) conducted a systematic review of literature published between 1985 and 1995, and identified only 16 SBMH studies which used a randomized control design and standardized measures. Seven of the studies employed cognitive behavioral treatments targeting symptom reduction and improvement of functioning in areas of depression, substance use and school adjustment, seven employed social skills training aiming at substance use and school adjustment, and two studies used teacher consultation as the intervention to change pre-referral practices and reduce behavioral symptoms. All three types had some empirical support for their effectiveness, although some of the outcomes were mixed and it remained unclear whether positive effects can be maintained for a longer term post treatment. CBT in schools seemed effective but studies did not involve anxiety disorders. Social skills training seemed effective in modifying environmental factors such as peer acceptance, and reducing aggression although the question remained whether such effects could also be achieved with other externalizing behaviors (ADHD, etc).

A program that showed effectiveness with internalizing and externalizing symptoms is the Valley Mental Health (VMH) day treatment model (Robinson & Rapport, 2002; Robinson 2004). VMH is a comprehensive school-based program for children and youth with serious emotional disorders (SED) in Utah public schools. The program implemented academic and mental health treatment components into day treatment classroom settings that were “indistinguishable from regular education classrooms for the casual observer” (Robinson, 2004, p.17-4). Guided by a multidisciplinary team each 24-student classroom received services from a clinical social worker and behavioral specialist, a special education teacher and an academic aide. Components rested on behavioral modification including a token system, individualized behavioral contracts, social skills training, and weekly family therapy. In a non-experimental study of VMH involving 124 students ages 5-17, both elementary and adolescent age groups improved significantly but showed different patterns of improvement over time. Younger students improved significantly during the first three months in the program while adolescents improved significantly in their 3-6 months time interval. Treatment response was equally likely among boys and girls, across diagnostic categories and in treating

internalizing and externalizing symptoms. Nonetheless, 75% of students still scored within the range of clinical intervention needs at the final assessment.

Mixed results were found for the RECAP program (Reaching Educators, Children, & Parents), a program seeking to promote social skills for young children (Han, Catron, Weiss, & Marciel, 2005). 149 children, mostly African-American girls, between the ages of four to five years participated in RECAP which consisted of a classroom behavior management system and a teacher administered social skills training curriculum delivered to the classroom, on-site teacher training and consultation, and group parent training conducted by a program consultant. While parent ratings did not show significant effects of treatment, teacher ratings did show statistically significant improvements for some behaviors (attention, withdrawal, and emotional reactivity) and social skills seven months after treatment.

### ***Programs Focusing on Externalizing Problems***

A meta-analysis by Wilson, Lipsey, and Derzon (2003) evaluated 221 studies of SBMH programs that included outcome measures for aggressive behaviors. The authors distinguished between demonstration programs, i.e. those implemented and evaluated by a researcher and typically not available without the interest of the researcher, and routine practice programs of which authors found only very few in the empirical literature. Most programs involved a majority of boys and lasted less than 20 weeks, 20% even less than seven weeks. Fifty-two percent of programs had weekly contact with students, predominantly in group formats, and most had less than 50 hours of total contact time. Overall, results of the meta-analysis show that all effect sizes for intervention groups were higher than those for control conditions. Different intervention strategies produced similar effects. Behavioral approaches and counseling showed the largest effects, social competence training with and without cognitive-behavioral components followed closely behind, and multimodal and peer mediation programs showed the smallest effects. The key advantages of successful interventions were related to being well implemented and relatively intense, including one-on-one formats, and being administered by teachers. Effect sizes were higher for randomized studies but did not differ significantly from non-randomized designs. Effects for the few routine practice programs were overall quite small and considerably smaller than those produced by demonstration programs. Comparison groups that were not treated did not show any naturally occurring changes in aggression while intervention effects reduced aggression levels. Thus, the main effect of successful interventions was not so much the prevention of potential

increases in aggressive behavior but rather the reduction of aggression that would otherwise continue unabated.

Reddy and Richardson (2006) recently reviewed 26 school-based prevention and intervention programs for children with emotional disturbance, and selected three exemplary programs based on five criteria: (1) the program was designed specifically for children at-risk for or with ED, (2) the program focused on academic and behavior outcomes, (3) outcome data for each program was available, (4) each program had at least three published outcome studies (including follow-up data); and (5) each program was nominated by experts in the field of school psychology and child mental health as an excellent program.

The first program selected, *First Step to Success*, is a home and school early intervention program for young children (grades K through 2) who show early signs of antisocial behavior such as difficulties with peer and teacher relationships, aggressive and disruptive behavior, and internalizing behaviors such as anxiety, inattention, and withdrawn behaviors. Its main objective is pro-social skill training to prevent the development of long-term and more serious anti-social behavior patterns. First Step includes three modules: a proactive universal screening process; consultation-based school intervention with the child, peers, and teacher; and intensive parent training focused on improving academic performance and adjustment. A recent quasi-experimental study of First Step (Walker, Golly, McLane, Kimmich, 2005) involved 211 (n) children in Oregon found positive results. Children in the treatment group showed statistically significant improvements from pre- to post treatment for aggression, adaptation and academic engagement.

*Parent Teacher Action Research* (PTAR) is a prevention program for elementary children at-risk for antisocial behavior patterns. It provides universal social skills instruction and screening for all students. Teachers can choose social skills curricula, and teams can customize the program to meet children's individual needs. Teams include individuals involved in the child's life at home and school. PTAR has shown to be effective for fostering home and school collaboration in that it emphasizes and even mandates parent involvement. This mandate, however, makes it difficult to implement PTAR when parents opt not to be involved (Reddy & Richardson, 2006).

The third program identified by Reddy and Richardson, the *Intensive Mental Health Program* (IMHP), is also an intervention program for elementary children. Designed to increase access to mental health services, and promote interdisciplinary training, the program developed out of a collaborative partnership between Lawrence, Kansas, Public Schools and the Clinical Child Psychology Program at the University of Kansas. IMHP includes

psychosocial interventions, group and individual therapy, social skills and relaxation training, behavior management and the use of medication (Reddy & Richardson, 2006). The program operates therapeutic classrooms for three hours a day, and offers support and consultation for educators, other service providers, and caregivers. Treatment for children is individualized and can vary in length but is guided by nine principles: 1. maintain placement in the child's home and neighborhood school; 2. emphasize an evidence-based approach; 3. focus on cognitive and behavioral skill development; 4. attend to cross-setting linkages and the interrelationships among school, after-school settings, and home; 5. emphasize generalization and maintenance of skills; 6. collaborate with everyone involved, gain consensus on goals and treatment strategies; 7. view assessment and diagnosis as an ongoing process; 8. maintain a developmental focus; and 9. cultivate an authoritative parenting (developmentally appropriate expectations coupled with warmth and positive attention). Measured changes on the Child and Adolescent Functional Assessment Scale (CAFAS) showed significant improvements for overall functioning in children (N=50) from the time of intake to discharge (Vernberg, Jacobs, Nyre, Puddy, & Roberts, 2004).

A small experimental study of the Youth Experiencing Success in School program (YESS) involved 42 students referred for ADHD and Oppositional Defiant Disorder (ODD) (Owens, Richerson, Beilstein, Crane, Murphy, & Vancouver, 2005). YESS offers a treatment package containing CBT methods for daily report cards, parent education, coordination of care, individual child sessions, teacher training and consultation for elementary school children in rural southeast Ohio. Clinicians were on site 20 hrs/week, met bi-weekly with teachers for scheduled times and are available on the spot as needed. Outcomes were positive but did not yield strong effects.

A study of Positive Attitudes Toward Learning in Schools (PALS) compared youth in school-based or clinic-based treatment for externalizing difficulties (Atkins et al., 2003, 2006). PALS consists of a manualized behavior management program, as well as home visits and parent groups, and uses parent advocates in recruitment and as ongoing liaisons with families. Results for the first cohort showed intended results around engaging families in that a majority of parents in the school based group agreed to and participated in services whereas a majority of parents in the clinic-based group did not. Eighty percent of PALS families remained in the program nine and twelve months later. Other outcome data are mixed. Positive associations of PALS were noted for children's academic performance (as rated by teachers), and behaviors

(as rated by parents). However, in part due to interruptions in the research process, results remain tentative.

Stronger findings are reported in a quasi-experimental study comparing the effectiveness of SBMH services versus clinic-based services (Armbruster & Lichtman, 1999). Examining outcomes for youth (mostly males between ages of 5 -11) in an urban area in Connecticut, the authors found that both groups showed virtually identical, significant improvements in outcomes. Although more youth in the school sample were referred for externalizing behaviors, both samples were not statistically different in their initial and final diagnostic evaluations. Children in both groups were seen for a similar ratio of sessions per month (3.1 and 3.3, respectively) although youth in the clinic sample were seen longer (for an average of 8 months versus 5.3 months in schools) and thus had more sessions (19 versus 13 total sessions). In light of the findings, the authors conclude that school based services were advantageous particularly because they reached a population of poor minority children often not served well in clinic settings: Fourteen percent of the school sample had serious, previously un-diagnosed impairments; school based treatment significantly reduced no shows and attrition, and transportation problems were nonexistent. In addition, school personnel anecdotally reported that behavior, attendance, and school functioning had improved.

A quasi-experimental, pretest-posttest study (Franklin et al., under review) assessed the effectiveness of a school-wide solution-focused approach in a public alternative school to prevent dropout. The solution-focused alternative school (SFAS) had eight main characteristics: (1) faculty emphasis on building strengths of students, (2) attention given to individual relationships and student progress, (3) emphasis on students' choices and personal responsibility, (4) overall commitment to achievement and hard work, (5) trust in students' evaluations, (6) focus on students' future success instead of past difficulties, (7) celebrating small steps towards success, and (8) reliance on goal-setting activities. Results showed that students in the experimental group earned significantly more credits over time and rated their school experiences more positively than similar students from a comparison group. Over half of the experimental group entered post-graduate education program after graduating from SFAS.

Carpenter-Aeby and Aeby (2005) analyzed data of annual program evaluations (1994-1999) from a grant funded alternative school to conduct a pre-posttest study for program effects on chronically disruptive students. Their measures focused on two main outcomes of

interest: (1) whether there was improvement of students' social functioning and academic achievement and (2) if the program mission was met, i.e. a reduction of dropout and removal of chronically disruptive students from traditional public schools, and provision of social services to students in the alternative school. The total sample consisted of 599 (n) mostly male African-American adolescents. Overall, the school program which employed a psycho-social approach with a focus on collaborative, social skill building produced mixed results across the different years. In years 2 and 3, students' psychosocial functioning, self-esteem and depression scores improved significantly. Similarly during some years, life skills and locus of control scores improved. The drop out rate improved most consistently, dropping to 8% compared to 45% in the district prior to the program. Although at 90 and 180-days follow-up points students' academic functioning had improved, they did not have passing grades. Comparable results emerged from a small pilot study employing reality therapy and an in-school support room with middle school boys with emotional disorders (including ADHD, CD, ODD etc.) (Passaro, Moon, Wiest, & Wong, 2004). The average behavior improved, and there was a decrease in out of school suspensions (12%) but none of the students moved to less restrictive placement.

Knoff et al. (2004) describe outcomes of another school-wide effort, Project ACHIEVE, that implemented a system of positive behavioral self-management skills in three elementary schools in Florida and Texas. The project aimed to maximize student achievement, create a safe and positive school environment, create effective teaching and problem-solving teams, increase and sustain effective instruction and strong parent involvement. To these ends three levels of self-management were targeted: a) teaching children self-management skills to self-control and independent learning, b) teaching staff self-management skills to run effective classrooms, and c) transporting self-management skills to the organizational level for strategic planning. Program components included teaching pro-social skills, accountability, consistency, special building-wide situation analysis, crisis prevention and response, and community and family outreach. Results for the first site compared ten years of project data to one year of baseline data and showed a reduction of referrals to special education (61% decrease), reduction of SpEd placements (57% decrease), and out-of-school suspensions (29% decrease). Analysis at the second site evaluated seven years of project data and noted a slight decrease in SpEd referrals and placements, as well as a decrease in discipline referrals to principal's office, in-school and out-of-school suspensions. Results at the third site were based on five years of project data. Here, data indicated increases in SpEd referrals and

placements, but a sharp drop in discipline referrals, and better grade retention. All three sites reported overall improvements in academic achievement.

Out-of-school suspension rates were also at the center of a study that evaluated the impact of expanded mental health services in 41 elementary schools in Baltimore (Bruns et al., 2005). Data indicated that the presence of ESMH clinicians did not predict out of school suspension (OSS) rates. Rather factors such as school size, percent of students living in poverty, and school attendance rate were found to be predictors of the suspension rate. School attendance was the most robust predictor of a school's suspension outcomes. Higher school attendance was associated with lower OSS rate and fewer overall suspension days. Also, the higher the percentage of poor students and minority students was the average length of OSS. These results are consistent with previous studies that have found OSS to disproportionately impact poor and minority students.

### ***Programs Focusing on Internalizing Problems***

A small but compelling experimental study of the Skills for Academic and Social Success program (SASS; Masia et al., 1999; Masia-Warner et al., 2005) involved 35 adolescents diagnosed with social anxiety disorder involved in a wait-list control trial. Students, a majority of whom were Caucasian girls between the ages of 13 and 17 years, participated in SASS which consisted of social skills training, exposure, and realistic thinking components delivered in 12 weekly group sessions (ca. 40 min. each), two brief individual meetings (15 min.), and two group booster sessions. Paying particular attention to design the program around the needs of the school, sessions lasted no longer than a typical class period, and did not interrupt academic courses. The school environment was considered a natural setting for exposure to encourage generalization. To this end, teachers participated in two psycho-educational meetings (30 min.), were asked to identify students' specific difficulties, and conducted classroom exposures supervised by group leaders. The program further utilized outgoing school peers to facilitate social interactions. Four weekend social events (90 min.) included pro-social "peer assistants" and provided real-world exposures and opportunities for generalization of learned skills. To further enhance generalization of skills, parents attended two group meetings (45 min.) at school during which they received psycho-education regarding social anxiety and learned techniques to address their child's anxiety. Results showed that SASS reduced social anxiety and avoidance, and enhanced social functioning as measured by an independent evaluator, parents, and adolescents. A remarkable 67% of the SASS group, compared with 6% in the wait-list group, no longer met diagnostic criteria for

social phobia. Treatment gains were maintained nine months following intervention with indications of accrued improvements. Of the nine participants treated in the first year of the study, seven voluntarily went on to serve as peer assistants for subsequent treatment groups.

Another approach targeting anxious children (ages 7-11 years) is the FRIENDS program, a manualized cognitive behavioral approach used with 61 mostly white female students from middle class families (Bernstein, Layne, Egan, & Tennison, 2005). Designed and implemented by staff from a University Medical Center, the program recruited participants from three elementary schools and conducted its treatment groups after hours at children's schools. Comparison of three conditions, namely (1) group CBT for children, (2) group CBT for children plus parent training group, and (3) a no-treatment control group, showed that both treatment groups were superior to no treatment in decreasing anxiety. Combining both treatment groups, the effect size was moderate (.58). Several measures indicate that CBT with parent training resulted in greater benefits, however, not all measures supported this finding. To accommodate schools and families sessions were held in the evening, dinner for family members and child care for siblings were offered. The authors conclude that these accommodations supported regular attendance at treatment sessions and contributed to the high program completion rate of 92%.

Also incorporating a parent component, an experimental study by Gillham et al. (2006) compared the effectiveness of a cognitive-behavioral intervention for middle school students at risk for depression. Implemented at school sites by staff of the University of Pennsylvania, the program amended the Penn Resiliency Program for children and adolescents (PRP-CA) with the Penn Resiliency Program for parents (PRP-P), which taught parents the same cognitive-behavioral skills as their children. The sample was highly self-selected and consisted mostly of Caucasian boys who came from affluent families (most families reported income of \$60,000/year and more). While youth received eight 90-minute group sessions, parents met in small, interactive groups (10-12 people) for six 90-minute group sessions all held at the children's schools. On average, 69% of students and 63% of parents attended all sessions. The intervention lowered depression and anxiety scores and achieved significant reductions by the six and twelve months follow-up period. Large effects were noted for anxiety symptoms and medium effects for depression. The research design did not allow to evaluate the impact of the parent component itself.

An experimental study with students (ages 13-15) in New Zealand implemented a school intervention based on a manualized 11-session-program called RAP which was originally designed in Australia and then adjusted for New Zealand populations (RAP-Kiwi) (Merry, McDowell, Wild, Bir, & Cunliffe, 2004). The program incorporated cognitive-behavioral and interpersonal therapy principles with 392 (N) students assigned randomly to the treatment or a placebo control group. Results indicate a small but statistically significant effect. Students in the experimental group lowered their depression scores more than students in the placebo group who participated in arts/ crafts activities (also using a manualized curriculum). Students evaluated both intervention and placebo as reasonably enjoyable and useful although the placebo scores were slightly better. Teachers were less positive about the program since they did not like being tied to a manualized approach.

An experimental study in Germany (Poessel, Baldus, Horn, Groen, & Hautzinger, 2005) assessed the effects of a universal program ("LISA") geared to reduce and prevent adolescent depression by increasing self-efficacy. LISA is a manualized CBT prevention program focused on social competence building in 10 weeks of meetings (1.5 hours each). Two features stand out compared to other SBMH programs: (1) students were separated by gender because a pilot study had shown higher cooperation of students in same-gender-groups; and (2) no teacher was allowed to participate or remain in the classroom during sessions because authors surmised that students are likely to be socialized to a teacher's academic role and would find it difficult not to slip into the achievement framework common in school settings. Students' self-reports indicated that LISA participants remained on a low level of depressive symptoms and had larger social network sizes, while the control group showed increasing amounts of depressive symptoms and a reduced use of social networks, especially for those students who had already been assessed as having low self-efficacy. Participants low on self-efficacy benefited most from LISA and showed significantly fewer depressive symptoms than comparable controls in the three-month follow-up.

### ***Full-Service Community Schools***

Dryfoos (2002) reviewed 49, mostly unpublished, evaluations of full-service community schools. Even though the methodological quality of the evaluations varied widely, Dryfoos noted that 46 of the 49 evaluations reported some positive outcomes. Academic improvements (in 36 programs) were predominantly found over a two to three year evaluation period in elementary schools; in eight of these programs gains were limited to students with special education needs. Improvements in attendance were noted in 19 programs, suspension rates

decreased in eleven as did high-risk behaviors such as substance abuse, teen pregnancy etc. Twelve programs increased parent involvement. Funding remained dependent on creative piecing together of various sources. As Dryfoos points out, a minimum of \$100,000 a year is required to create the infrastructure for a community school that would at least support a coordinator, planning processes, council meetings, and accountability efforts.

### **Statewide Efforts**

Several statewide initiatives, often consisting of an amalgamation of various programs, have been reported and/or evaluated in the literature.

*Illinois and Kentucky: Wraparound and Positive Behavioral Support.* Illinois and Kentucky have employed wraparound processes to create systems of Positive Behavioral Support (PBS) in schools. Wraparound is a planning process that emerged from the Systems of Care approach in community mental health and incorporates a family-centered, strengths based philosophy with families as central members in the planning team (Eber et al., 2002). Eber et al. (2002) describe how the wraparound process can be implemented in schools' Individualized Education Plans (IEP) or other planning processes to meet the needs of students, especially those with higher needs. Sponsored by the Illinois State Board of Education, the Illinois' Emotional and Behavioral Disturbance (EBD) Network has provided leadership and support for wraparound through schools, and has partnered with Safe School Initiatives in Illinois to implement positive school-wide discipline systems (Eber, 2003). Positive Behavioral Support (PBS), which originated as a method for young people with developmental disabilities and/or mental retardation, receives growing attention for preventing unwanted behaviors in youth in general and special education (Kutash et al., 2006). Staff from over 200 schools in Illinois have received training in PBS, and over 75 site-based coaches have been identified and trained (Eber, 2003). A brief summary of results from some ongoing evaluations of PBS were presented at a symposium at the annual conference "A System of Care for Children's Mental Health: Expanding the Research Base" at the University of South Florida, and indicate decreases in disciplinary referrals, in- and out-of-school suspension rates (Eber & Palmer, 2003).

Kentucky's *Building Bridges* program implemented a wraparound approach in 21 schools in the Appalachian Mountains and conducted a small non-experimental pre-post test study (Eber, 2003; Armstrong et al., 2004). The Bridges program offers three tiers of PBS in schools including school-wide universal support for all students, targeted services and

interventions for individuals and small groups, and intensive interventions through wraparound. A full mental health service team (consisting of service coordinator, family liaison, and intervention specialist) is available on each school campus to provide individual and group treatment, including prevention, early intervention, short-term and intensive services. Each school also has access to a regional consultant who supports the service teams. Outcome data were analyzed for a sample of 27 (n) youth with serious needs. Results indicated improvements in grades, increase in functioning and strengths, and decreases in behavioral problems (although overall problem and externalizing scores remained in clinical range). Between baseline and one-year follow-up, the percent of students who were suspended decreased from 40% to 15%, and the percent of time spent in detention decreased from 49% to 28%. With respect to teacher-reported classroom behavior and peer relations, the greatest changes were noted in students' ability to cooperate with others, relate appropriately with peers, remain on task, participate in activities with peers, and complete class work. Teachers reported less improvement in following directions, being on time, obeying rules, and having friends. The number of youth in detention or jail remained stable, use of cigarettes and marijuana increased, while reported alcohol use decreased.

*Idaho: The "Community Resources for Families" (CRFF)* program, funded by the Idaho Department of Health and Welfare, enables schools to hire Community Resource Workers for elementary schools in order to identify children who are underperforming due to unmet emotional or physical needs (Phillips & Gregory, 2004). Community Resource Workers provide up to 30 days of home-based assessment and referral services as well as emergency assistance to families who wish to participate. Emergency services allow for an additional 90 days of case management services, and flexible funds. For a random sample of 206 (n) clients who had received emergency services, data provide some support to conclude that families accepted referrals to community resources and became more active participants in meeting their children's needs. Interviews with school staff and case file analysis indicated improvements in children's school readiness including higher grades, improved attendance and behaviors. Self reliance measures showed increased employment rates in families, improved housing situations, higher enrollment in medical insurance, and more contacts with community resources even after the program ended.

South Carolina's SBMH initiative<sup>1</sup> sets out to improve coordination of and access to mental health services in schools statewide (Freeman, 2004). To this end, S.C. provides early intervention services in schools including services such as consultations with school staff, case management (brokering services), in-services for teachers on mental health topics, immediate availability of mental health staff to school administrators for emergency services, mental health educational groups in classrooms (conflict resolution etc.), violence prevention programs, truancy prevention programs, mentoring programs, and parent support. Information available on the website of the South Carolina State Department of Mental Health ([www.state.sc.us/dmh/schoolbased](http://www.state.sc.us/dmh/schoolbased)) indicates that in FY 2006 60% of mental health services for youth were provided in schools. A total of 282 mental health counselors in school-based programs served in excess of 10,000 youth in over 400 schools (40% of S.C. schools), including 214 elementary, 118 middle, 67 high, and 25 alternative/other schools. On average youth were served 3-9 months. Resulting Improvements included: increases in school attendance (96%), discipline referral decrease (76%), behavior and life skills (74%), increased length of stay within family home and community programs (99%), decrease inpatient/hospitalizations (12%), and decrease juvenile justice referrals (98% remain out-of-trouble). Survey data also shows high rates (>80%) of family satisfaction with the program. These latest results add to an earlier large scale study (n >1,000) conducted in 1999 (Freeman, 2004) which indicated that the S.C. program served mostly high needs youth who improved over time. Using the Child and Adolescent Functional Assessment Scale (CAFAS), students' results indicate that in a 5-months period 74% of youth in the "moderate symptoms" group and 82% of youth in the "severe" group improved at least one CAFAS level. Overall, the S.C. initiative appeared to reach students at a younger age (a mean age 11 years in 1999 as opposed to a mean age of 15 years in 1993), and served a higher proportion of girls (38%) whose predominantly internalizing symptoms would have been overlooked before. The S.C. initiative is funded through various means including the S.C. Departments of Mental Health and Education, uses cost-share agreements with state and local agencies, schools, non-profits and reimbursable mechanisms contracts, as well as through additional grants and foundation sources (Freeman, not dated).

### ***Parent Involvement***

Parent involvement is an element consistently underscored in recommendations for SBMH practices (Weist et al., 2005), although not all program studies report on a parent

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<sup>1</sup> The contact person for the S.C. SBMH initiative is: Elizabeth V. Freeman, SC DMH: Division of School-Based Services, [EVF88@scdmh.org](mailto:EVF88@scdmh.org)

component and few explicitly evaluate it. Most programs that specifically attend to the issue find that successfully involving parents is in most cases associated with increases in program effectiveness (Rones & Hoagwood, 2000; Gillham et al., 2006). While no study can claim a direct causality of parent involvement for better results in students' outcomes, authors suggest that including parents and teaching them key components of the program most likely supports the generalization of effects beyond the school context (Bernstein et al., 2005; Masia-Warner et al., 2005). Such generalization effects are underscored in conceptual work but rarely attended to in the empirical literature (Weist, 1999).

*Strategies to increase parent involvement.* Some programs mandate parent involvement (Reddy & Richardson, 2006) which increases participation but automatically excludes students whose parents did not wish to participate. Other strategies to increase parent engagement and involvement include the use of parent advocates for recruitment and as ongoing liaisons with families (Atkins et al., 2003, 2006), as well as offering services during evening hours to accommodate family schedules, serving dinner for family members, and providing child care for siblings (Bernstein et al., 2005). The Center for School Mental Health Analysis and Action (formerly Center for School Mental Health Assistance, 2002) provides a summary and overview of barriers to and strategies for family involvement in ESMH programs in their *Family Involvement in Expanded School Mental Health Programs Resource Packet* (available online: [http://csmha.umaryland.edu/resources.html/resource\\_packets/download\\_files/family\\_involvement\\_2002.pdf](http://csmha.umaryland.edu/resources.html/resource_packets/download_files/family_involvement_2002.pdf)).

### ***Client Satisfaction***

Client satisfaction is at times included as a measure in program evaluations. However, the empirical literature grants little attention to the question how satisfied students themselves are with the SBMH services they received. Only a study by Nabors et al. (1999) specifically assessed the satisfaction of a sample of mostly female, African-American adolescents in an urban area. Students were overall satisfied because: (1) they were involved in a caring relationship with someone they trusted (35%); (2) the program provided emotional release (31%); and (3) it was a place to learn new interpersonal and/or coping skills (14%). Students reported feeling dissatisfied when counseling sessions were too short or their counselor could not see them immediately when they had a problem (37%). Thirty-two percent were not dissatisfied with anything. Clinician training and availability, student grades, and class impacted adolescents' ratings of satisfaction. For example, students in therapy with licensed psychologists reported higher satisfaction than those in therapy with psychology trainees.

Juniors and Seniors reported feeling more satisfied with therapy than Freshmen and Sophomores. Authors noted a trend for students with higher grades to feel less satisfied than those with lower grades. No published studies could be identified that specifically included family satisfaction. (Data on family satisfaction in the South Carolina program, see above, were only available online).

### ***Addressing Diversity***

Programs specifically designed to address differences in gender, age, or cultural background are virtually non-existent in the literature. Only one program description specifically mentioned separating girls and boys into same-gender groups because it appeared to foster participation (Poessel et al., 2005). Otherwise, common gender trends appear in the diagnoses of internalizing versus externalizing symptoms, i.e. more girls are diagnosed with internalizing disorders while more boys receive externalizing diagnoses (Caseau, Luckasson, & Kroth, 1994; Walter & Peterson, 2002). Subsequently, current SBMH programs aiming to reduce externalizing behaviors are dominated by male participants, while interventions targeting internalizing symptoms involve a relatively higher number of girls.

#### **Summary: Best Practices in SBMH**

No single model has emerged as a best practice but overall, there is growing evidence that SBMH programs enhance access to and utilization of mental health services, result in positive outcomes, and can be at least as effective as programs offered by clinics or community mental health providers (Hunter, 2004).

**Domains of targeted outcomes** in SBMH programs typically include one or more of the following:

- academic functioning (e.g. improving or passing grades, reduction in drop out)
- social functioning (e.g. reduction of peer problems, increase of social skills, reduction of out-of-school suspensions)
- Symptom reduction (e.g. reduced aggression, disruption, anxiety, depression, etc.)
- Systems change (e.g. reduction of SpEd referrals, SpEd placements)

**Components of Effective Interventions** in SBMH tend to include a combination of the following:

- Cognitive behavioral treatment approaches

- Skill building (e.g. problem-solving, social skills)
- Parent involvement
- Teacher involvement
- Teacher training
- Consultation for teachers

**Programs for Students with SED.** Although some targeted interventions for students with the highest needs, i.e. students with serious emotional or behavioral disorders, result in improvements, many youth in this group continue to experience a high level of difficulties in their social and academic functioning. To maximize effectiveness for this population, best practices include

- providing comprehensive approaches for assessment and intervention that targets multiple domains (i.e., academic, behavior, and social competencies),
- using psychometrically sound and clinically sensitive outcome assessment instruments,
- focusing on quantifiable behavioral goals and well-defined treatment components,
- providing intensive skill-based parent and teacher training,
- offering home and school contingency management plans along with intensive case management
- utilizing parents and teachers as agents of change,
- include varied treatment agents (e.g., regular and special education teachers, teacher aides, parents, school psychologists, social workers),
- use different treatment settings (e.g., regular education classrooms, self-contained classrooms, lunch/recess, after school programs, home, neighborhood, and community agencies), and
- offer longer-term supports

(Reddy & Richardson, 2006; Greenberg, Domitrovich & Bumbarger, 2000)

**Questions identified as important but not yet explored much** in the empirical literature concern

- how to best involve parents, teachers, and peers;
- how to enhance the generalization of program effects to affect improvements for youth not only in classrooms but other environments as well (Weist, 1999);
- the impact of programs effects over an extended period of time;

- and how programs could be more sensitive to the needs of diverse populations, in other words how they could attend more effectively to issues such as gender, culture and ethnicity, and different age groups.

### **Key Issues for Implementing and Sustaining SBMH Programs**

Another section of SBMH literature focuses on questions about how to best implement and sustain programs. Some empirical knowledge is available about how to transfer programs which have proven effective in agencies or clinics to school settings and how to sustain SBMH programs beyond demonstration or research conditions.

### **Transferring Existing Evidence-Based Practices to Schools**

Although efforts to establish evidence-based practices (EBP) in children's mental health have broadened the knowledge base, transferring effective programs from clinic or community settings into school systems is neither easily accomplished nor a guarantee for success (Schaeffer et al., 2005). Authors caution that attempts to transfer EBP to schools frequently meet challenges and barriers such as

- difficulties finding and choosing an appropriate program;
- the costliness of EBP when manuals, training etc. must be purchased;
- problems organizing meetings and sharing materials between involved parties (teachers from various schools, mental health professionals etc.);
- managing logistics such as finances, training, quality assurance;
- making manualized protocols acceptable for a diverse student body who differ in cultural background, diagnostic pictures, age, gender etc.;
- overcoming resistance from students, parents and teachers;
- gaining status and legitimacy in the school system (especially salient for external mental health providers).

(Schaeffer et al., 2005; Massey, Armstrong, Boroughs, Henson, & McCash, 2005)

Functional Family Therapy (FFT), for example, is an already established evidence-based form of family therapy that has been implemented in various school settings in the Northeast and the West Coast. Based on their experiences with the process, Mease and Sexton (2004) arrive at four recommendations for successful implementation in school settings:

- (1) Early acceptance of the program into the school system was easier if prior positive and collaborative relationships existed between school and mental health agency. It seems useful for mental health agencies to introduce their services and resources to school staff before beginning specific implementations.
- (2) SBMH programs should select appropriate and validated programs, making use of treatment programs that have already been empirically validated and demonstrated success, and that can provide clear clinical guidelines for staff. In the case of FFT, which also offers guidelines for implementing their protocols, intensive clinical training and supervision enhanced treatment fidelity throughout implementation at schools.
- (3) Securing stable program funding is a major task in any SBMH effort. Mease and Sexton recommend that specific staff members should be assigned the tasks of funding maintenance while staff implementing and providing services not be burdened with financial aspects.
- (4) Keeping educators involved and invested through an array of extracurricular activities that promoted collegial and collaborative interaction and planning. The authors deemed the specific contents of joint plans less important than that the planning process was perceived as positive, allowed for team building, clarified roles, provided for systematic and ongoing communication, and were informed by program evaluations.

Most of the current literature on transferring EBP in schools pays insufficient attention to school context, and tends to neglect outcomes that are relevant to schools, such as academic achievement and Special Education referrals (Ringeisen, Henderson, & Hoagwood, 2003). Attending to contextual factors on the individual, organizational, and state level, would likely help overcome such challenges and increase the fit of a given model (Ringeisen et al., 2003). An overview of individual, organizational, and state/federal level factors that could be useful to consider have been identified by Ringeisen et al. (2003) and are provided in Appendix A.

**Consent and Confidentiality.** A specific area of interest when implementing SBMH programs revolves around the issue of consent and confidentiality (Massey et al., 2005, Evans, 1999). Concerns about confidentiality are cited as obstacles to the use of school-based care and remain largely unaddressed in current research (Evans, 1999). Thus it is crucial to clarify early in the process (1) how a SBMH program will go about obtaining consent from students and their parents, (2) how teachers will be educated about the significance of parental consent before treatment and consultation, (3) and how to maintain confidentiality in the school environment (Massey et al., 2005).

Evans (1999) specifically argues for the use of active consent procedures since parents do not send their children to school expecting them to receive mental health treatment. While SBMH programs are aware that, generally, children cannot be treated without parental consent, many programs use passive consent procedures which include children in SBMH programs services absent the protest of parents (Evans, 1999). Passive consent may be a way to circumvent problems arising from complicated situations such as divorced parents, children in detention facilities, foster children, and married parents who might disagree. However, Evans (1999) cautions that the use of such passive consent procedures may be an infringement of parental rights and could result in significant professional liability.

### **Developing Sustainable Programs**

Empirical and conceptual literature has identified several areas important for sustaining SBMH programs beyond demonstration or research conditions. First, programs run by internal school staff may be more easily sustained than those implemented by providers external to schools. As a qualitative study (Massey et al., 2005) found, outside providers often strive to maintain the integrity of program efforts by protecting the service unit, while internal programs seek to sustain their efforts by disseminating program concepts and practices. Second, the buy-in of teachers and other school staff appears to be a major factor for implementing sustainable programs. A review by Han and Weiss (2005) identified many factors directly related to teachers' motivation, such as the perceived support by the school principal, teachers' beliefs about their self-efficacy and acceptability of the program, professional burnout, the compatibility of the program with their own beliefs about student behavior, and the anticipated effectiveness of the program. In addition to these pre-implementation factors, teacher training and provision of feedback were factors that contributed to sustainability.

**Collaboration.** As a crucial ingredient for the design of effective and sustainable SBMH programs, collaboration with and involvement of parents, teachers, other school staff, and the community best begins at the program design phase and not just at implementation (Ringeisen et al., 2003). Involving stakeholders throughout the process, introducing ideas slowly and stepwise, and offering component trainings over time fosters favorable conditions such as positive attitudes, requisite skills, etc. (Ringeisen et al., 2003).

One example for early and ongoing collaboration with educators is the “teacher-consultants” model of the Butler County School District of Ohio (Paternite, 2004). Specifically focused on enhancing collaborations with educators, one key component of the model is the

use of teachers as consultants. Experienced educators serve as an advisory group, and function as liaisons for less experienced staff members to consult on matters of social, emotional, behavioral and learning needs. They also develop and implement plans addressing specific goals and objectives for the program, and are considered key members of the mental health team and the larger “Ohio Mental Health Network for School Success” (Paternite, 2004).

### **Summary: Implementing and Sustaining SBMH programs**

SBMH programs are best sustainable when they are integrated into existing efforts to improve school systems and when the school context has undergone changes to create attitudes, expectations, support mechanisms, and an infrastructure that fit (Han & Weiss, 2005).

Important features that increase the probability of successfully implementing and sustaining services include

- maximizing the “goodness of fit” of interventions with natural routines of the setting, through consistency with the values and skills of people at the school, and by producing reinforcing short-term results;
- addressing consent and confidentiality early;
- enhancing acceptability of the program to schools and teachers;
- feasibility of running the program on an ongoing basis with minimal but sufficient resources;
- consistency of program implementation;
- ongoing inclusion of parents and teachers;
- integration of program content into general classroom curriculum;
- flexibility and adaptability;
- strategies for generalization.

(Han & Weiss, 2005; Lewis & Newcomer, 2002; Rones & Hoagwood, 2000; Weist, 1999)

### **Strategies for Financing SBMH**

Comparatively little is found in the literature about strategies of financing SBMH programs (Kutash et al., 2006). Nonetheless it is apparent that SBMH programs rely on creatively blending funds from federal, state, local, public and private sources. The national survey by Foster et al. (2005) reported that the most frequently cited source of funding identified by school districts is the Individuals with Disabilities Education Act (IDEA). Federal dollars received through IDEA were used by 63% of responding schools in the survey. In addition,

55% reported the use of state special education funds, 49% local funds, 41% general state funds, and 38% Medicaid. School districts' mental health budgets are mostly spent on paying salaries for mental health staff (58%) or to pay outside providers who serve students at schools (26%). The remaining finances go toward administrative expenses, technical assistance, development, and training.

As Kutash et al. (2006) point out, three strategies can be used by SBMH to draw upon **Medicaid** to finance mental health services for school-aged children:

- 1) There is "Fee for Service Claiming," under which Medicaid eligible services provided by school-based health clinics may be reimbursed by the state Medicaid agency.
- 2) "Administrative Claiming" allows for activities by school staff that concern student mental health to be reimbursed under Medicaid, including facilitating Medicaid enrollment, transportation and translation services, special education services and program planning, interagency collaboration, or administrative case management.
- 3) "The third strategy is for two or more agencies to create a partnership to "leverage" new and additional funding through Medicaid. An example of this strategy would be a partnership between a public school district and a mental health agency. Another leveraging strategy suggested by advocates is the greater integration of Medicaid and IDEA for youth who qualify for both (Bazelon Center for Mental Health Law, 2003)." (Kutash et al., 2006, p. 71)

**Resource Packets on Financing.** The two technical assistance centers for SBMH, at the University of California Los Angeles, and at the University of Maryland Baltimore, have both put forth information packets containing strategies for financing SBMH programs

- 1) The packet from the Center for Mental Health in Schools (at UCLA) is entitled "An introductory packet on financial strategies to aid in addressing barriers to learning" (2004) and focuses on funds to aid the creation of positive learning environments for students through redeployment (i.e. the use of available funds), refinancing (i.e. freeing funds for reinvestment), raising revenue (i.e. generating new funding), and restructuring financial systems (i.e. using financial structures to effect change). Chapters include overviews of financing discussions, sources for financing (including internet sites), models of funding, and grant writing assistance. [The entire publication is available for download online: <http://smhp.psych.ucla.edu/pdfdocs/Financial/fund2000.pdf>]
- 2) The packet from the Center for School Mental Health Analysis and Action (at the University of Maryland) is entitled "Funding Expanded School Mental Health Programs" (2002) and

provides a brief overview of sources for extramural funding and summarizes the grant review process, including timelines that are typically involved in applications for funding, and offers information on additional resources and publications about funding. [The entire publication is available for download online under:

[http://csmha.umaryland.edu/resources.html/resource\\_packets/resource\\_packets.html](http://csmha.umaryland.edu/resources.html/resource_packets/resource_packets.html)]

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## Appendix A. Context Factors for Implementing Sustainable SBMH Programs

*[Published in Ringeisen, H., Henderson, K., & Hoagwood, K. (2003). Context matters: Schools and the "research to practice gap" in children's Mental Health, School Psychology Review, 32 (2), 153–168]*

**Table 1**  
**Individual Level Factor Questions for Consideration**

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Does a selected intervention affect school-relevant child outcomes ?

Does this intervention help in understanding the relationship between mental health problems and academic underachievement ?

Who will deliver a targeted intervention ? Do these individuals have school roles associated with child mental health ? Have they played a role in either intervention development or implementation planning?

Has the intervention been shown to be helpful to these providers (e.g. decrease professional stress, improve student achievement, decrease classroom disruptive behavior) ?

What type of professional training and ongoing infrastructure will need to be in place to support such providers in intervention implementation ? Can these factors be measured and incorporated into research designs to assess their relative effect upon intervention delivery ?

**Table 2**  
**Organizational Level Factor Questions for Consideration**

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What school resources are already being used to address child mental health needs ?

Will current school-based programs and their allotted resources add to or detract from the implementation of a new mental health intervention ?

Could such interventions replace and/or improve upon existing programs (maximizing available resources) or will they take valued resources away from existing programs ?

What type of school resources (e.g. available staff, structures, funding) will need to be in place to support a target intervention ?

Do such resources exist or will they need to be created prior to program implementation ? What features of organizational climate affect the delivery of school-based mental health interventions ? How can such features be created, supported, and sustained ?

Can the effect of organizational characteristics, such as climate, upon program implementation and outcomes be measured and incorporated into research designs ?

**Table 3**  
**State and/or Federal Level Factor Questions for Consideration**

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Which students are targeted for a selected intervention? Based upon service eligibility criterion, where are such students located (general classrooms, alternative placements)? Are special education resources available to meet such student needs?

How might a target intervention's primary outcomes be perceived in light of academic accountability standards? Could a mental health intervention that improves student academic functioning aid a school's response to state academic accountability concerns?

Will a selected intervention take school resources away from state or national priorities? Will targeted mental health programs work in conjunction with or against current state financial incentives/disincentives for the educational placements of students with emotional or behavior problems (e.g., mainstreaming or alternative educational placements) ?

## Appendix B. Key Resources

Among the many publications reviewed for this report, several stand out as key resources for readers who wish to take a closer look at the specifics of mental health services in schools, or who seek assistance in determining how to best choose and implement specific programs. For such details and assistance, readers are encouraged to consult the following resources:

### National Reports and Guides

The Center of Mental Health Services (Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services) provides the most comprehensive picture of current mental health services in the country. The report *School Mental Health Services in the U.S. 2002-2003* is available online at [www.samhsa.hhs.gov/](http://www.samhsa.hhs.gov/)

The University of South Florida, Tampa, has published the report: *School-Based Mental Health: An Empirical Guide for Decision-Makers* (Kutash, K., Duchnowski, A., Lynn, N., 2006) it is available for downloading at <http://rtckids.fmhi.usf.edu/rtcpubs/study04/default.cfm>

### National Technical Assistance Centers

Three national technical assistance centers funded by the Health Resources and Services Administration, with co-funding from the Substance Abuse and Mental Health Services Administration provide guidance, training, research, resources, and technical assistance to improve the quality of mental health in schools.

- 1) The Center for School Mental Health Analysis and Action  
University of Maryland Baltimore  
Department of Psychiatry  
737 West Lombard St., 4th Floor  
Baltimore, MD 21201 <http://csmha.umaryland.edu>
- 2) School Mental Health Project  
University of California Los Angeles  
Center for Mental Health in Schools  
Department of Psychology  
P.O. Box 951563  
Los Angeles, CA 90095-1563 <http://smhp.psych.ucla.edu>
- 3) Research and Training Center for Children's Mental Health  
Department of Child and Family Studies  
Louis de la Parte Florida Mental Health Institute  
University of South Florida  
13301 Bruce B. Downs Blvd.  
Tampa, FL 33612-3807 <http://rtckids.fmhi.usf.edu>

### Additional organizations and their weblinks

The Center for Health and Health Care in Schools at George Washington University:  
<http://www.healthinschools.org/>

The U.S. Department of Education: <http://www.ed.gov>

The National Center of School-Based Healthcare: <http://www.nasbhc.org/>

The Frontier Mental Health Services Resource Network: is a consortium of nine university-based, state/local government-based and independent experts from a variety of mental health/substance abuse-related fields. The network collects, analyzes, and summarizes of knowledge regarding mental health services in "frontier" counties as well as technical assistance to rural agencies.  
<http://www.wiche.edu/MentalHealth/Frontier/index.htm>

Coalition for Community Schools: <http://www.communityschools.org>

### Appendix C. Matrix of Empirical Literature

#	Author(s) & Date	Type of Article	Key Variables/Components	Main Conclusions
1	Armbruster, P. & Lichtman, J. (1999). Are school-based MH services effective? Evidence from 36 Inner City schools, <i>Community MH Journal</i> , 35 (6), 493-504.	Outcome comparison of school-based MH services in 36 schools (256 cases) and clinic-based services (220 cases) for youth (ages 5-18) in an urban area in CT. Services in both settings were provided by the same therapists.	<p><i>Sample:</i> Both groups consisted mostly of male (60%) youth between 5-11 years of age, most frequently living in single parent households. Groups differed in that significantly more children in the school sample received Medicaid (82% versus 65% in clinic) and belonged to ethnic minorities (92% versus 48%). 98% of school sample lived in New Haven while only 48% of the clinic sample resided in the same area. Though more youth in the school sample were referred for externalizing behaviors, both samples were not statistically different in their initial and final diagnostic evaluations.</p> <p><i>Pre-post measures:</i> Children's Global Assessment Scales (C-GAS), Global Assessment of Functioning (GAF),</p> <p><i>Intervention:</i> not specified. Clinic treatment included family and individual modalities, School-based treatment consisted mostly of individual treatment.</p>	<p><i>Results:</i> Both groups showed virtually identical, significant improvements in outcomes. Children in both groups were seen for a similar ratio of sessions per month (3.1 and 3.3, respectively) although youth in the clinic sample were seen longer (for an average of 8 months versus 5.3 months in schools) and thus had more sessions (19 versus 13 total sessions). In light of the findings, the authors find school based services advantageous in that they reached a population of poor minority children often not served well in clinic settings. 14% of the school sample had "other", i.e. serious previously un-diagnosed impairments. In school based treatment no shows and attrition were reduced significantly, transportation problems were nonexistent. In addition, school personnel reported anecdotally that behavior, attendance, and school functioning had improved.</p> <p><i>Limitations:</i> no untreated control; group, no random assignment, only clinicians as source of outcome data, no details on types of treatment.</p>
2	Armstrong, B.A., Robbins, V., Collins, K. & Eber, L. (2004). The Bridges project—meeting the academic and MH needs of children through a continuum of positive supports. In Robinson (Ed.), <i>Advances in School-Based MH Interventions</i> . Kingston, NJ: Civic Research Institute, Chapter 15.	Description of program, and selected outcomes (N=27)	The Bridges program in Kentucky places a full MH student services team (consisting of service coordinator, family liaison, and intervention specialist) on school campus to provide individual and group treatment, including prevention, early intervention, short-term and intensive services. Each school has access to a regional consultant who supports the service teams. Building upon Kentucky's system of care initiative (IMPACT), the program offers three tiers of positive behavioral supports (PBS) in schools: (1) school-wide universal support for all students, (2) targeted services and interventions for individuals and small groups, and (3) intensive interventions through wrap-around. For a sample of 27 (n) youth 6- and 12-months-follow up data assessed academic and behavioral functioning, symptoms, strengths, substance use, criminal activity and satisfaction.	<p>Outcome data is based on youth with serious needs who participated in the wraparound service tier. Results indicate improvements in grades, increase in functioning and strengths, and decreases in behavioral problems (although overall problem and externalizing scores remained in clinical range). The number of youth in detention or jail remained stable, use of cigarettes and marijuana increased, while reported alcohol use decreased. A majority of youth reported satisfaction with the program.</p> <p><i>Limitations:</i> reported outcomes only on one part/population of program, small sample, no comparison group.</p>
3	Atkins, M.S., Frazier, S.L., Birman, D., Adil, J.A., Jackson, M., Graczyk, P.A., Talbott, E., Farmer, A.D., Bell, C.C. & McKay, M.M. (2006). School-Based	Experimental study of the PALS program in three elementary urban public schools, using data from two cohorts of students assigned (randomized by school)	<p><i>Sample:</i> majority African-American boys.</p> <p><i>Measures:</i> Iowa Connors rating scale (teacher and parent rating); social skills rating system; clinical service units (dosage of treatment)</p> <p><i>Intervention:</i> experimental, school-based condition: PALS, a manualized behavior management program, as well as home visits and parent groups, use of</p>	<p><i>Results:</i> Engagement rates (measured for the first cohort) were significantly higher than for clinic-based control, and 80% of PALS families remained in the program at 9 and 12 months. Outcome data are mixed. Positive associations of PALS were noted for children's academic performance (as rated by teachers), and behaviors (as rated by parents). Results remain tentative in part due to interruptions in the</p>

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	Mental Health Services for Children Living in High Poverty Urban Communities, <i>Administration and Policy in Mental Health and Mental Health Services Research</i> , 33 (2), 146-159.	to either school-based (experimental) or clinic based interventions (control).	parent advocates in recruitment and as ongoing liaisons with families.	research process.
4	Atkins, M.S., Graczyk, P.A., Frazier, S.L., & Abdul-Adil, J. (2003). Toward A New Model for Promoting Urban Children's MH: Accessible, Effective, and Sustainable School-Based MH Services, <i>School Psychology Review</i> , 32 (4), 503-514.	Description of three studies from Chicago focusing on 1) improving access to services by engaging parents in design and delivery of services (Positive Attitudes Toward Learning in Schools – PALS) 2) improving child functioning at school by training teachers in evidence-based practices for ADHD children (Teacher Key Opinion Leaders – KOL) 3) planning for sustainability of services through multi-tiered model that builds on strengths of parents and teachers (System Of Care Chicago – SOC-C)	1) PALS: 75 (n) youth (K-6 <sup>th</sup> grade) randomly assigned to school-based or clinic based treatment for externalizing difficulties. Majority (97%) in both groups African American, school based sample had fewer females (44%) than clinic based sample (55%). PALS engaged community consultants, provided classroom and family services including parent groups, home visits, phone calls etc. 2) KOL: KOL tested the hypothesis that highly regarded teachers could better infuse their colleagues with practices and knowledge (social diffusion theory). 10 schools were randomly assigned to experimental or control group (matched for SES, school size, ethnic composition, and achievement level). 13 (n) teachers from 6 experimental schools who were identified as highly regarded by their peers received training in EBP for ADHD students (1 <sup>st</sup> -4 <sup>th</sup> grade). 3) SOC-C: collaborative planning of school-based and community-based services to arrive at three tiered approach for inner city children including universal, targeted, and intensive interventions (wraparound).	1) PALS results: whereas a majority of parents in the school based group agreed to and participated in services after 3 and 9 months, a majority of parents in the clinic-based group did not. 2) KOL: Preliminary results indicate that teachers supported by KOL teachers use strategies for ADHD students significantly more often. 3) SOC-C: collaborative planning is geared to enhance shared vision, reduce overidentification, enhance access to MH services and, enhance sustainability of services. Together authors suggest emerging model of SBMH services 1. accessibility (engaging families, removing barriers, involving community members) 2. effectiveness (reducing symptoms AND improving overall child functioning, goals consistent with family priorities, utilizing EBP from MH and education) 3. sustainability (emphasize indigenous resources, develop capacities in families and schools, planning services that can be implemented with existing resources).
5	Bernstein, G.A., Layne, A.E., Egan, E.E & Tennison, D.M. (2005). School-Based Interventions for Anxious Children, <i>Journal of the American Academy of Child and Adolescent</i>	Experimental study of school-based intervention for anxiety in children ages 7-11 comparing (1) group CBT for children, (2) group CBT for children plus parent training group, and (3)	<i>Sample:</i> 61 (n) students identified as meeting DSM IV criteria for separation anxiety disorder, generalized anxiety disorder, and/or social phobia, majority white female, 62% living with both parents, 33% with divorced parent, largely middle class families. <i>Measures:</i> ADIS, Child and Parent Interview Schedules, MASC a 39-item self-report instrument; Screen for Child Anxiety Related Emotional Disorders	<i>Results:</i> Both treatment groups were superior to no treatment control group in decreasing children's anxiety symptoms. (Combining both treatment groups the effect size was moderate: .58). Several measures indicate that CBT plus parent training results in greater benefits, however, not all measures support this finding. Timing of therapy sessions (i.e., after school or early evening) and duration of treatment delivery were arranged to

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	<i>Psychiatry</i> , 44 (11), 1118-1127.	no-treatment control.	(SCARED) a 41-item parent rating of a child's anxiety symptoms, the Global Improvement scale of the Clinical Global Impressions (CGI) instrument, services questionnaire. <i>Intervention:</i> (1) group CBT using the FRIENDS program (Barrett et al., 2000), a manual-based CBT program developed in Australia provided after school in groups of 8-10, 60 minute sessions for 9 weeks. Booster sessions 1 month and 3 months later. (2) group CBT for children plus parent training: same as (1) with simultaneous parent sessions (one parent per child was required to participate).	accommodate school and family schedules. Dinner for family members and child care for siblings were provided for families in the combined treatment condition. These factors helped to ensure regular attendance at treatment sessions and contributed to the high completion rate (92%). <i>Limitation:</i> no longer-term follow up (yet), sample restricted to rural and suburban, Caucasian population.
6	Brener, N.D, Martindale, J. & Weist, M. D. (2001). MH and Social Services: Results from the School Health Policy and Programs Study 2000, <i>Journal of School Health</i> , 71 (7), 305-312.	Article summarizing results from SHPPS 2000 study which collected nationally representative data on state (n=51, 100% response), district (n= 513, 71% response) and school levels (n=876, 64% response), including public and private schools (elementary through high school).	1. Overview of current models. (Research on models is fragmented) Variety of Models: <ul style="list-style-type: none"> <li>• Full integration of MH into each school (z.B. Adelman &amp; Taylor) whereby school teams coordinate/ broker services rather than provide them.</li> <li>• School based Health services which include MH services</li> <li>• Student Assistance Programs (SAPs) modeled after Employee Assistance Programs (EAPs)</li> <li>• Expanded School MH programs (ESMH) (z.B. Weist) for students in SpEd and GenEd</li> </ul> 2. Results of SHPPS 2000, Question-naires assessed school MH and social services at state and district levels (staffing, organization, facilities, services, evaluations etc.). At the school level, computer assisted interviews were conducted.	<i>State and District Level:</i> Few states (18.5%) but more districts (40.8%) require that someone oversee or coordinate MH or social services in Schools. Nonetheless, 51% of states and 63% of districts have such a person. Very few states and districts have requirements regarding the staff-student ratios for psychologists, social workers etc. At least one School based health center (on school property) existed in 80% of all states, and 59% of districts had arrangements for school-linked MH services in which off-site professionals provide services to students. <i>School Level:</i> 78% of schools had a person overseeing MH or social services, and 77% had a guidance counselor providing services, 66% a psychologist, 44% a school social worker. 91% of schools provided a room for counseling. More than one half offer SAPs.
7	Bruns, E.J., Moore, E., Stephan, S.H., Pruitt, D., & Weist, M.D. (2005). The impact of school MH services on out-of-school suspension rates, <i>Journal of Youth and Adolescence</i> , 34 (1), 23-30.	Matched comparison study of 41 elementary schools with expanded school MH services (ESMH) and 41 schools without such services in Baltimore examines effects on out of school suspensions.	<i>Sample:</i> 82 (n) schools were matched on (in order of consideration): total enrollment, percent of students in poverty, school attendance rate, and percent nonwhite students. Mean school size was 394 (SD = 152.6), students in poverty: m =72.3 (SD = 9.53); school attendance rate m= 93.2 (SD = 2.0), and percent nonwhite students m= 89.1 (SD = 20.5). <i>ESMH Intervention:</i> masters- or doctoral-level clinicians from 10 different community agencies provide services for a total of 40 h per week (1.0 full-time equivalent).. Services generally include individual, group, and family therapy; student assessment; implementation of prevention and school-wide	<i>Results:</i> presence of ESMH clinicians in the study schools did not predict any of the three OSS variables. Instead school size, percent of students in poverty, and school attendance rate were all found to be predictors of OSS rate. Percent of students in poverty and percent nonwhite students in a school were both positively associated with the length of OSS. School attendance rate was the most robust predictor of a school's suspension outcomes, with higher school attendance associated with lower OSS rate and fewer overall suspension days. Both school poverty and percent nonwhite students accounted for length of OSS. In general, these results are consistent with previous studies that have found OSS to disproportionately impact poorer students and minority students. The authors point out that ESMH schools were not

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			<p>programs; and teacher consultation.</p> <p><i>Measures:</i> (1) Out of school suspension (OSS) rate (total OSS incidents divided by total enrollment); (2) mean OSS duration (in days); and (3) rate of total suspension days (total suspension days divided by total enrollment).</p>	<p>systematically employing an explicit strategy for addressing OSS, and that suspended students were rarely among those formally referred for services.</p> <p><i>Limitations:</i> not randomized, schools with ESMH may differ in other ways not measured here.</p>
8	<p>Bruns, E.J., Walrath, C., Glass-Siegel, M., &amp; Weist, M.D. (2004). School-based MH Services in Baltimore, <i>Behavior Modification</i>, 28 (4), 491-512.</p>	<p>Exploratory survey study of 56 (n) elementary schools with (n=8) and without (n=7) expanded school MH services (ESMH) in Baltimore examines the association of ESMH with school climate and referral patterns to SpEd services.</p>	<p><i>Sample:</i> The pool of 456 survey respondents consisted mostly of teachers (63.4%), 15.4% nonprofessional classroom personnel such as paras, 6.6% nonclassroom professionals such as school counselors, 2.6% administrators and principals, and 7.2% support staff.</p> <p><i>Measures:</i> (1) climate surveys collected data from various school personnel (mean return rate: 81%) on 21 items about general climate, and MH resources, as well as questions about reasons for referral; (2) SpEd referral rates.</p>	<p><i>Results:</i> Analyses found significant differences on climate scores between classroom personnel and those not working in the classroom. Professional teachers especially had significantly lower scores overall. However, no significant climate differences between ESMH and non ESMH conditions except for the perceived availability of MH resources and MH support for teachers. In regards to SpEd referrals, ESMH teachers had referred significantly fewer students to SpEd (especially fewer of those with emotional or behavioral difficulties) and more to MH services than did teachers in the comparison group.</p>
9	<p>Carpenter-Aeby, T.&amp; Aeby, V. (2005). Program evaluations and replications of school-based MH services and family-community interventions with chronically disruptive students, <i>School Community Journal</i>, 15 (2), 37-61.</p>	<p>Pre-posttest study using secondary data from annual program evaluations (1994-1999) from a grant funded alternative school with SBMH services</p>	<p><i>Sample:</i> the total sample consisted of 599 (n) students, of which a majority was male, African-American, 15 years old, referred for fighting, and typically assigned from 90 days.</p> <p><i>Intervention:</i> The school-based intervention employed a psycho-social approach modeled after Comer with a focus on collaborative, social skill building.</p> <p><i>Measures</i> focused on two main outcomes of interest: (1) whether there was improvement of students' social functioning and academic achievement (scales for depression, self-esteem, locus of control, life skills) and (2) if the program mission was met (reducing dropout, removal of chronically disruptive students from traditional public schools, and provision of social services to students in the alternative school)</p>	<p><i>Findings:</i> Overall, at 90 and 180-days- follow-up points students' academic functioning had improved (but they did not have passing grades). In their psycho-social functioning, self-esteem and depression scores improved significantly in years 2 and 3. Similarly during some years, life skills and locus of control scores improved. More consistently the drop out rate improved, dropping to 8% (compared to 45% in the district prior to the program)</p> <p>No comparison or control group.</p>
10	<p>Center for School Mental Health Assistance (2002). <i>Empirically-Supported Interventions in School Mental Health</i>, Center for School Mental Health Assistance, University of Maryland Baltimore.</p> <p>Available online:</p>	<p>Review by the Center for School MH Assistance at the University of Maryland about resulting in a list of empirically supported programs the Center found adaptable or useful for school-based approaches</p>	<p>EBP program inventories listed by other national organizations, (such as APA, Center for Substance Abuse Prevention etc.), and program descriptions were obtained and coded for level of intervention/ prevention, and judged for ease of implementation in real-world school settings.</p> <p>For detailed list of programs see original document available online:  <a href="http://csmha.umaryland.edu/resources.html/resource_packets/download_files/empirically_supported_2002.p">http://csmha.umaryland.edu/resources.html/resource_packets/download_files/empirically_supported_2002.p</a></p>	<p><u>Internalizing Disorders</u> (Anxiety/ Depression): treatments that have been demonstrated to be effective with anxious and depressed youth all CBT. Although they vary in their particular sequencing of interventions, most CBT protocols for internalizing disorders involve such specific techniques as self-monitoring of mood and physiological symptoms, engaging in pleasurable activities, use of self-rewards, relaxation and imagery, assertiveness and social skills training, and cognitive restructuring. Many of the treatments for youth with internalizing disorders also include a family component, to address mood/anxiety problems among</p>

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	<a href="http://csmha.umaryland.edu/resources.html/resource_packets/download_files/empirically_supported_2002.pdf">http://csmha.umaryland.edu/resources.html/resource_packets/download_files/empirically_supported_2002.pdf</a>		df	parents and to teach parents to help children use their new cognitive-behavioral skills. <i>Externalizing Disorders</i> (ADD, OD, CD): According to the treatment research that is currently available, the only effective psychosocial treatments for these disorders are those that involve behavioral modifications administered consistently in the youth's natural environment by the youth's caregivers – parents and teachers. With the exception of non-comorbid youth with impulse-control problems, individual therapies for youth with externalizing behavior disorders have not been demonstrated to be effective. Moreover, group therapies that involve treating large numbers of these youth at the same time have been shown in many cases to actually make externalizing symptoms worse.
11	Crisp, H. L., Gudmundsen, G.R. & Shirk, S.R. (2006). Transporting Evidence-Based Therapy for Adolescent Depression to the School Setting, <i>Education and Treatment of Children, 29</i> (2), 287-309.	Description and preliminary results of implementing the Adolescent Mood Project (AMP), an empirically supported CBT program for depression in adolescents, at a high school in Denver.	<i>Sample:</i> 27 (n) (74% female, 59% Caucasian; 26% Hispanic, 11% Black; majority with major depressive or dysthymic disorders; comorbidity with Anxiety and Conduct DO) <i>Intervention:</i> The Adolescent Mood Project is an empirically supported CBT program for depression, 12 weekly individual therapy sessions delivered by clinical research staff at school sites <i>Measures:</i> Beck Depression Inventory	Preliminary results indicate reduction of depressive symptoms similar to randomized controlled trials of AMP
12	Kutash, K., Duchnowski, A., & Lynn, N. (2006). <i>School-based mental health: An empirical guide for decision-makers</i> . Tampa, FL: University of South Florida, The Louis de la Parte Florida Mental Health Institute, Department of Child & Family Studies, Research and Training Center for Children's Mental Health. Retrieved online 2/9/2007 from <a href="http://rtckids.fmhi.usf.edu/rtcpubs/study04/default.cfm">http://rtckids.fmhi.usf.edu/rtcpubs/study04/default.cfm</a>	Monograph summarizing of current knowledge about SBMH	Chapters include overview and history, conceptual frameworks, empirical findings, funding, policies, future directions (advocating a public health framework)	Reveals that the field of SBMH services can be characterized as fragmented, under-developed, and emerging. It suffers from confusion that comes from the different languages and terminologies used by the various agencies that provide SBMH, especially the education and mental health systems. On the other hand, there is a strong multi-disciplinary and multiagency presence in the field, there is a growing evidence base for specific programs, and a growing recognition of the need for a comprehensive, integrated approach in order to "scale up" the localized successes that emerge to a level that will have significant national impact. Research is still sparse, but growing. Analysis of federal policies reveals a common thread: the need to implement the "public health model" more fully.

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13	Dryfoos, J. (2002). Full-service community schools: creating new institutions. <i>Phi Delta Kappan</i> , 83 (5), 393-399.	Summary of a review of 49 (mostly unpublished) community school evaluations	<p>(1) Definition of community school (Coalition for Community Schools): A community school, operating in a public school building, is open to students, families, and the community before, during, and after school, seven days a week, all year long. It is jointly operated and financed through a partnership between the school system and one or more community agencies. Families, young people, principals, teachers, youth workers, neighborhood residents, college faculty members, college students, and businesspeople all work together to design and implement a plan for transforming the school into a child-centered institution.</p> <p>(2) Summary of review (see next column)</p>	<p><i>Review:</i> In 46 of the 49 reports some positive outcomes were cited but the quality of the reports varied enormously. Outcomes included: academic improvements (36 programs, mostly elementary schools; over 2-3 year period; in eight of these programs gains were limited to students with SpEd needs); improved attendance (19 programs); reduced suspension rates (11) ; reductions in high-risk behaviors (substance abuse, teen pregnancy etc.; 11 programs); increases in parent involvement (12). Implementation and evaluation studies show that it is not easy to create the complex network of partnerships needed for successful implantation. A big portion of difficulties arise on the day-to-day level: sharing classrooms with outsiders, needing custodians to change working hours, dealing with confidentiality. Funding remains dependent on creative piecing together of various sources. A minimum of \$100,000 a year is required to create the infrastructure for a community school that would at least support the coordinator, planning, council meetings, and accountability efforts. Title I grants might be the most reliable source of funds to begin the process of transformation.</p>
14	Eber, L. et al. (2003). School-wide Systems of Positive Behavioral Support: Promoting the Mental Health of all Students, including those with SED, Symposium, <i>15th Annual Conference Proceedings—A System of Care for Children’s Mental Health: Expanding the Research Base</i> , Conference Proceedings, University of South Florida, Tampa, FL., pp. 109-206	Collection of studies on school-based wraparound and PBIS presented at a conference	Includes pre-post test on sample of (n=27) Kentucky’s Building Bridges program, which employs school-based wraparound and positive behavioral supports in 21 schools in the Appalachian Mountains. Illinois is a demonstration site for the National PBIS Center. Sponsored by the Illinois State Board of Education, the Illinois’ Emotional and Behavioral Disturbance (EBD) Network provides leadership and support for wraparound through schools, and has partnered with safe school initiatives in Illinois to implement positive school-wide discipline systems. Staff from over 200 schools have received training in PBIS, and the PBIS approach has been implemented in their schools. In addition, over 75 site-based coaches have been identified and trained.	<p><i>Results</i> show improvements in academic performance, youth receiving school-based wraparound experienced fewer suspensions and detentions following entry into the program. Between baseline and one-year follow-up, the percent of students who were suspended decreased from 40% to 15%, and the percent of time spent in detention decreased from 49% to 28%. With respect to teacher-reported classroom behavior and peer relations following participation in the program, the greatest changes were noted in students’ ability to cooperate with others, relate appropriately with peers, remain on task, participate in activities with peers, and complete class work. Teachers reported less improvement in following directions, being on time, obeying rules, and having friends.</p> <p><i>Limitations:</i> small sample, no control or comparison group.</p>
15	Evans, S. W. (1999). MH services in schools: Utilization, effectiveness,	Critique of current MH services.	Utilization effectiveness consent	<p><i>Utilization:</i> parents and adolescents reported that school-based services were convenient; concerns about confidentiality and the quality of care were obstacles to the use of school-based care; youth utilize school-based</p>

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	<p>and consent. <i>Clinical Psychology Review</i>, 19, 165-179.</p>			<p>mental health services at a rate higher than traditional clinic- and hospital-based services. It could be that convenience is the most compelling factor for increased utilization.  <i>Effectiveness:</i> while various studies support effectiveness of school-based MH programs, there is insufficient data to establish that outcomes generalize across settings and time. Generalization strategies should be part of the training and program implementation.  <i>Consent:</i> Largely unaddressed in current research. The general rule is that children cannot be treated without parental consent (exceptions such as crisis situations, civil commitment etc. Many situations complicate the consent rules such as divorced parents, children in detention facilities, foster children, and married parents who disagree. Many programs use passive consent (no reaction from parents leads to inclusion of child in services) which may be an infringement of parental rights and can result in significant professional liability. The author argues for the need for active consent (especially since parents do not send children to school to receive MH treatment).</p>
<p>16</p>	<p>Foster, S., Rollefson, M., Doksum, T., Noonan, D., Robinson, G., Teich, J. (2005). <i>School MH services in the United States, 2002–2003</i> (DHHS pub. No. SMA 05-4068). Rockville, MD: Center for MH Services, Substance Abuse and MH Services Administration. Retrieved from <a href="http://www.mentalhealth.samhsa.gov/media/ken/pdf/SMA05-4068/SMA05-4068.pdf">http://www.mentalhealth.samhsa.gov/media/ken/pdf/SMA05-4068/SMA05-4068.pdf</a></p>	<p>first national survey of MH services based on a representative randomized sample (n= 1,147 from 1.064 districts; equals a return rate of ca. 60%) from the approximately 83,000 public elementary, middle, and high schools and their associated school districts in the United States.</p>	<p>The purpose of the study was to identify:          (a) The MH problems most frequently encountered in school setting and the MH services delivered (Eligibility; Types of MH Problems; Problems by School Level and Gender; Resource Use; MH Services in U.S. Schools);          (b) The administrative arrangements for the delivery and coordination of MH services in schools (Contracting MH Units and School-Based Health Centers; Administrative Functions in School MH; Coordination and Referral Practices);          (c) The types and qualifications of staff providing mental health services in schools; and          (d) Issues related to funding, budgeting and resource allocation, and use of data regarding MH services at the elementary, Middle, and High School Level.</p>	<p><i>Key findings:</i>          (1) Nearly three quarters (73 percent) of the schools reported that “social, interpersonal, or family problems” were the most frequent MH problems for both male and female students.          (2) For males, aggression or disruptive behavior and behavior problems associated with neurological disorders were the second and third most frequent problems.          (3) For females, anxiety and adjustment issues were the second and third most frequent problems.          (4) All students, not just those in special education, were eligible to receive mental health services in the vast majority of schools (87 percent).          (5) One fifth of students on average received some type of school-supported MH services in the school year prior to the study.          (6) Virtually all schools reported having at least one staff member whose responsibilities included providing MH services to students.          (7) The most common types of school MH providers were school counselors, followed by nurses, school psychologists, and social workers. School nurses spent approximately a third of their time providing MH services.          (8) More than 80 percent of schools provided assessment for</p>

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				<p>MH problems, behavior management consultation, and crisis intervention, as well as referrals to specialized programs. A majority also provided individual and group counseling and case management.</p> <p>(9) Financial constraints of families and inadequate school MH resources were the most frequently cited barriers to providing MH services.</p> <p>(10) Almost half of school districts (49 percent) used contracts or other formal agreements with community-based individuals and/or organizations to provide MH services to students. The most frequently reported community-based provider type was county MH agencies.</p> <p>(11) Districts reported that the most common funding sources for MH services or interventions were the Individuals with Disabilities Education Act (IDEA), State special education funds, and local funds. In 28 percent of districts, Medicaid was among the top five funding sources for MH services.</p> <p>(12) One third of districts reported that funding for MH services had decreased since the beginning of the 2000–2001 school year, while over two thirds of districts reported that the need for MH services increased.</p> <p>(13) Sixty percent of districts reported that since the previous year, referrals to community-based providers had increased. One third reported that the availability of outside providers to deliver services to students had decreased.</p>
17	Franklin, C., Streeter, C.L., Kim, J.S. & Tripodi, S.J. (under review). The Effectiveness of a Solution-Focused, Public Alternative School for Dropout Prevention and Retrieval	A quasi-experimental, pretest-posttest study	<p><i>Sample:</i> 46 (n) at risk students attending SFAS and 39 (n) adolescents in comparison group with similar characteristics from another high school within the same urban city;</p> <p><i>intervention:</i> Solution-focused, Alternative School (SFAS) with eight characteristics: (1) faculty emphasis on building strengths of students, (2) attention given to individual relationships and progress of the students, (3) emphasis upon the students' choices and personal responsibility, (4) overall commitment to achievement and hard work, (5) trust in students' evaluations, (6) focus on students' future success instead of past difficulties, (7) celebrating small steps towards success, and (8) reliance on goal-setting activities.</p> <p><i>Measures:</i> credits earned, attendance, graduation rates and The School Success Profile.</p>	<p><i>Results:</i> students in the experimental group earned significantly more credits over time than students from the comparison group and rated their school experiences as more positive on The School Success Profile. Over half of the experimental group had entered post-graduate education program after graduating from The Solution-focused, Alternative School (SFAS). Conversely, students in the comparison group had higher attendance and graduation rates but this outcome was found to be related to the differences in the two programs' attendance and graduation policies. The SFAS appears to show promise as an intervention for reducing dropout rates for at-risk adolescents and enabling them to earn high school credits and graduate from high school over time.</p>
18	Freeman, E.V. (2004). School-based MH	Description of the South Carolina SBMH program	Attempting to improve coordination of and access to MH services in schools statewide, SC provides early	Analysis of students' characteristics shows that in 1999 the program reached students at a younger age (mean age 11)

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	<p>programs—the South Carolina Experience. In Robinson (Ed.), <i>Advances in School-Based MH Interventions</i>. Kingston, NJ: Civic Research Institute, Chapter 18.</p>	<p>including results from a large scale study (n &gt;1,000) conducted in 1999.</p>	<p>intervention services in schools. Services include:</p> <ul style="list-style-type: none"> <li>• Consultations with school staff</li> <li>• Case management (brokering services)</li> <li>• In-services for teachers on MH topics</li> <li>• Immediate availability of MH staff to school administrators for emergency services</li> <li>• MH educational groups in classrooms (conflict resolution etc.)</li> <li>• Violence prevention programs</li> <li>• Truancy prevention programs</li> <li>• Mentoring programs</li> <li>• Parent support</li> </ul>	<p>than in 1993 (mean age 15), and serves a higher proportion of girls (38%) whose predominantly internalizing symptoms would have been overlooked before. A majority of the population served were assessed as high needs youth. Average length of tx in SBMH was six to nine months as opposed to much longer average in clinic-based programs (2-3 years in 1993). Students' performance, behaviors, moods/self-harm, substance use, and thinking/ emotional were analyzed using the Child and Adolescent Functional Assessment Scale (CAFAS). Results indicate that in a 5-moths period 74% of youth in the "moderate symptoms" group and 82% of youth in the "severe" group improved at least one CAFAS level.</p> <p><i>Limitations:</i> outcome data is dated. variety of program components makes it difficult to discern which services are the crucial components.</p>
19	<p>Gillham, J.E., Reivich, K.,J., Freres D.R., Lascher, M.,Litzinger, S. &amp; Seligman, M.E.P. (2006). School-based prevention of depression and anxiety symptoms in early adolescence: a pilot of a parent intervention component, <i>School Psychology Quarterly</i>, 21 (3), 323-348.</p>	<p>Experimental study comparing effectiveness of cognitive-behavioral intervention with and without a parent component for middle school students.</p>	<p><i>Sample:</i> 44 parents randomly assigned to experimental or control condition, majority of their children were Caucasian boys; 59% married, 20% divorced; majority reported income of \$60,000/year and more. No significant differences between groups. <i>Experimental Intervention:</i> Penn Resiliency Program for children and adolescents (PRP-CA) plus Penn Resiliency Program for parents (PRP-P), teaching parents the same cognitive-behavioral skills as their children through eight 90 minute group sessions for youth (once a week), and six 90 minute group sessions for parents in small, interactive groups (10-12 people). On average 69% of students and 63% of parents attended all sessions. <i>Control group:</i> no treatment. <i>Measures:</i> Children's Depression Inventory; Revised Children's manifest Anxiety Scale at baseline, 2 weeks post intervention completion, 6 months and 12 months follow up.</p>	<p><i>Results:</i> The intervention lowered depression and anxiety scores significantly during the 6 and 12 months follow up period (not directly after the intervention) with large effects on anxiety symptoms and medium effects on depression.</p> <p><i>Limitations:</i> small sample, sample highly self-selected, mostly consisting of more affluent parents; since there was only a no-treatment control, the research design does not allow for a determination of the impact of the parent component itself.</p>
20	<p>Graczyk, P.A., Domitrovich, C.E., &amp; Zins, J.E. (2003). Facilitating the implementation of evidence-based prevention and MH promotion efforts in schools, in Weist, Evans,</p>	<p>Chapter reviewing characteristics of CASEL prevention programs</p>	<p>State of the art (Greenberg review and CASEL review). Review of universal prevention programs by Collaborative for Academic, Social and Emotional Learning (CASEL) includes more than 80 programs identified empirically supported practices. The question is how such model programs can be implemented in real-world conditions. Characteristics Implementation</p>	<p><i>Characteristics</i> of effective programs in prevention and MH promotion: Effective programs have a <u>theory of change at their core</u>, usually drawing on developmental theories, around which interventions and outcome measures are organized. They identify and address risk and protective factors in individuals, families and social environments for multiple years, and are integrated in schools and communities. <i>Implementation model:</i> <u>Theory-driven</u> implementation that</p>

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	& Lever, (Eds.), Handbook of School MH –Advancing Practice and Research. New York: Kluwer/ Plenum.			defines characteristics of intervention, guides training and support strategies, and assesses environmental conditions (classroom, school, district, community levels).
21	Greenberg, M.T. Domitrovich, C. & Bumbarger, B. (2000). <i>Preventing MH disorders in school-age children: A Review of the Effectiveness of Prevention Programs</i> , Prevention Research Center for the Promotion of Human Development, College of Health and Human Development, Pennsylvania State University.	Review of 34 (n) prevention program studies in which children (ages 5 to 18) showed early problems or high-risk for later disorder.	Included studies had to have 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, preferably follow-up data to examine the duration and stability of program effects, and a written manual that specified the procedures. Overall, authors note about limitations in the research base : Few studies meet the criteria for fully-validated program models. There is a lack of replication by independent investigators and an absence of comprehensive, long-term follow-up; there has been greater attention to preventive interventions focused on externalizing disorders. It is necessary to know more regarding for whom specific programs are most likely to be effective. With few exceptions, there has been little exploration of how the quality of implementation affects outcomes.	<i>Key findings:</i> <ul style="list-style-type: none"> <li>- Short-term preventive interventions produce time-limited benefits, at best, with at-risk groups whereas multi-year programs are more likely to foster enduring benefits.</li> <li>- Ongoing intervention starting in the preschool and early elementary years may be necessary to reduce morbidity.</li> <li>- Preventive interventions are best directed at risk and protective factors rather than at categorical problem behaviors. With this perspective, it is both feasible and cost-effective to target multiple negative outcomes in the context of a coordinated set of programs.</li> <li>- Interventions should be aimed at multiple domains, changing institutions and environments as well as individuals.</li> <li>- Prevention programs that focus independently on the child are not as effective as those that simultaneously “educate” the child and instill positive changes across both the school and home environments. The success of such programs is enhanced by focusing not only on the child’s behavior, but also the teacher’s and family’s behavior, the relationship between the home and school, and the needs of schools and neighborhoods to support healthy norms and competent behavior.</li> <li>- There is no single program component that can prevent multiple high-risk behaviors. A package of coordinated, collaborative strategies and programs is required in each community. For school-aged children, the school ecology should be a central focus of intervention.</li> <li>- In order to link to other community care systems and create sustainability for prevention, prevention programs will need to be integrated with systems of treatment. Few comprehensive interventions have been developed and evaluated that combine school-wide primary prevention together with secondary prevention and treatment.</li> </ul>
22	Greenberg, M.T., Domitrovich, C., & Bumbarger, B. (1999). Preventing mental	Review of 34 different programs	Characteristics shared by effective programs	Overall, programs were found to significantly reduce aggression, depression and anxiety and improve behavior and problem-solving skills. The review also found ten programs that have successfully reduced the risk for conduct problems. Characteristics shared by effective programs: Effective

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	disorders in school-aged children: A review of the effectiveness of prevention programs. Report to the Center for MH Services, SAMHSA, Prevention research Center, Pennsylvania State University, available at <a href="http://www.psu.edu/dept/prevention/">www.psu.edu/dept/prevention/</a>			universal prevention programs (programs that were addressed to broad populations of children, families and schools) focused on teaching emotional self-regulation as well as thinking and decision-making skills that improve social and emotional competence. Effective programs also created changes in the school and family ecology that supported the use and reinforcement of these new skills. Finally, they lasted one or more school years and were used regularly. Programs effective in reducing depression and anxiety symptoms focused on teaching children and youth how to alter and utilize more effective thinking and behavioral coping strategies, such as eliciting support in times of stress.
23	Han, S. S., & Weiss, B. (2005). Sustainability of teacher implementation of school-based mental health programs, <i>Journal of Abnormal Child Psychology</i> , 33(6), 657–663.	Review of empirical literature and conceptual article focused on factors on the teacher-level	<ul style="list-style-type: none"> <li>• Review of literature on factors related to teachers' implementation of school-based prevention and intervention programs</li> <li>• four basic ingredients that characterize potentially sustainable teacher-implemented classroom programs</li> <li>• a sequential model of the naturalistic processes underlying sustainability</li> </ul>	<p>Factors most directly related to teachers' motivation to implement programs: (a) support by the school principal, (b) teachers' self-efficacy beliefs, (c) professional burnout, (d) teachers' beliefs about the acceptability of the program, (e) the compatibility of the program with their own beliefs about student behavior, and (f) the anticipated effectiveness. In addition to these pre-implementation factors, (g) teacher training and (h) provision of feedback are factors that contribute to sustainability.</p> <p>Four basic ingredients for a sustainable program must be (a) acceptable to schools and teachers, (b) effective, (c) feasible to implement on an ongoing basis with minimal (but sufficient) resources, and (d) flexible and adaptable. Sustainability process model outlines three phases:</p> <p>(1) <i>Preimplementation Phase</i>, when teachers and administrators are introduced to the program, implementation plans are developed, etc.; (2) <i>Supported Implementation Phase</i>, during which teachers are trained in the program and receive ongoing in-classroom consultation; and (3) <i>Sustainability Phase</i>, when supplemental or external support for implementation (i.e., training, consultation) has been withdrawn.</p>
24	Han, S. S., Catron, T., Weiss, B., & Marciel, K. K. (2005). A teacher consultation approach to social skills training for pre-kindergarten children: Treatment model and short-term outcome effects. <i>Journal</i>	Experimental pre-post treatment study of a social skills program for 4-5 years old children (random assignment of schools, not children).	<p><i>Sample:</i> 149 (n) children in treatment (n= 86) or comparison group (n=66), The mean income was somewhat higher in the comparison group, and teacher rated difficulties were significantly higher in the treatment group at pre-treatment. Otherwise the two groups did not differ significantly: mostly girls, majority African-American, from single parent, low-income households.</p> <p><i>Intervention:</i> RECAP (Reaching Educators, Children,</p>	<p><i>Results:</i> Outcomes are mixed. While parent ratings did not show significant effects of treatment, teacher ratings do show statistically significant improvements for some behaviors (attention, withdrawal, and emotional reactivity) and social skills.</p> <p><i>Limitations:</i> lack of longer follow-up, non-equivalent groups (on income and teacher rated behavioral problems)</p>

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	<p><i>of Abnormal Child Psychology</i>, 33(6), 665–679.</p>		<p>&amp; Parents) program consisting of (a) a classroom behavior management system and a teacher administered social skills training curriculum delivered to the classroom; (b) site-based teacher training and consultation; and (c) group parent training conducted by a program consultant.</p> <p><i>Measures:</i> CBCL (parent rating), Caregiver-Teacher Report Form (teacher rated), social skills rating system (SSRS, parent and teacher rated) Post test: 7 months after pre-test</p>	
25	<p>Hoagwood, K. &amp; Erwin, H.D. (1997). Effectiveness of school-based MH services for children: a 10-year research review, <i>Journal of child and Family Studies</i>, 6 (4), 435-451.</p>	<p>Systematic literature review (1985-1995) focused on 16 (n) studies which used a randomized control design and standardized measures.</p>	<p><i>Sample:</i> 16 program studies of school-based MH services for children conceptualized as inclusive of primary preventive, targeted preventive, intervention, and treatment.</p> <ul style="list-style-type: none"> <li>• 7 employed CBT (targeting symptom reduction and improvement of functioning in areas of depression, substance use and school adjustment)</li> <li>• 7 studies employed social skills training targeting substance use and school adjustment</li> <li>• 2 studies used teacher consultation as the intervention to alter pre-referral practices and reduce behavioral symptoms.</li> </ul> <p>Studies are discussed with reference to the sample, targeted problem, implementation, and types of outcomes assessed, using a comprehensive model of outcome domains, called the SFCES model. The SFCES model includes five domains: symptoms (e.g., impulsivity, depression); functioning (e.g., capacity to adapt to the demands of home, school, and neighborhood); consumer perspectives (e.g., satisfaction with care, impact on family); environments (stability of primary environments at home, school, or neighborhood); and systems (level, type or costs of services).</p>	<p><i>Conclusions:</i> Three types of interventions, cognitive-behavioral therapy, social skills training, and teacher consultation, were found to have empirical support for their effectiveness, although some of the evidence was mixed. CBT in schools seems effective but studies did not involve anxiety disorders. Social skills training seemed effective in modifying environmental factors such as peer acceptance, and reducing aggression. The question is whether such effects would also be achieved with other externalizing behaviors (ADHD, etc). Overall, types of outcomes targeted in these studies were limited to functioning and, to a lesser extent, symptom reduction. Little attention has been directed to a broader range of outcomes, particularly those with clear policy relevance, such as parent perspectives, service impact, and costs. Future studies of school-based MH services should (a) investigate the effectiveness of these interventions with a wider range of children's psychiatric disorders; (b) broaden the range of outcomes to include variables related to service placements and family perspectives; (c) examine the combined effectiveness of these empirically-validated interventions; and (d) evaluate the impact of these services when linked to home-based interventions.</p>
26	<p>Knoff, H.M., Finch, C., &amp; Carlton, W. (2004) Project ACHIEVE and the development of school-wide positive behavioral self-management systems—prevention, intervention,</p>	<p>Description of program and outcomes from three longitudinal sites (elementary schools) in Florida and Texas.</p> <p><a href="http://www.projectachieve.info">www.projectachieve.info</a></p>	<p>Project ACHIEVE implements a school-wide system of positive behavioral self-management skills aimed to maximize student achievement, create a safe and positive school environment, create effective teaching and problem-solving teams, increase and sustain effective instruction and strong parent involvement etc. To these ends three levels of self-management are targeted: teaching children self-management skills to self-control and independent learning, teaching staff</p>	<p><i>Results</i> for Site 1: Comparing ten years of project data to one year baseline indicated a systematic improvement for: SpEd referrals (61% decrease), SpEd placements (57% decrease), and out-of-school suspensions (29% decrease). Less systemic and more varied in trends for different cohorts were discipline referrals to principal's office (overall 16 % decrease), and grade retentions (overall 47% decrease) Results site 2: comparing seven years of project data to available baseline data indicated: slight decrease in SpEd</p>

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	and intensive needs approaches. In Robinson (Ed.), <i>Advances in School-Based MH Interventions</i> . Kingston, NJ: Civic Research Institute, Chapter 19.		self-management skills to run effective classrooms, and transport self-management skills to the organizational level for strategic planning. Program components include teaching prosocial skills, accountability, consistency, special building wide situation analysis, crisis prevention and response, and community and family outreach.	referrals and placements, decrease in discipline referrals to principal's office, in-school and out-of-school suspensions. Results site 3: compares five years of project data to first year of implementation (used as baseline). Data indicate increases in SpEd referrals and placements, a sharp drop in discipline referrals, and increases in grade retentions. All three sites reported overall improvements in academic achievement.
27	Kratchowill, T. R., Albers, C.A., & Shernoff, E.S. (2004). School-based interventions, <i>Child and Adolescent Psychiatric Clinics of North America</i> , 13, 885-903.	Review	Article summarizes the overall state of Evidence-Based Practices in schools, organizations promoting EBP, the three tiered model of intervention and prevention, and provides examples of programs. Universal (primary prevention) program: Second Step (aggression reduction; promote pro-social behaviors). Selected (secondary prevention) program: Incredible Years Classroom Management Program (teacher development program to enhance positive reinforcement strategies). Targeted (tertiary prevention) program: multisystemic therapy.	Three tiered system has to find answers to challenges such as: appropriate screening to identify students with no, elevated and high risk factors; continuous monitoring of progress; implanting appropriate and effective professional development; and enhancing sustainability of program effects. <i>Second Step Program</i> : matched sample study showed positive effects at six months follow-up. <i>Incredible years Program</i> : Randomized control studies showed effectiveness in reducing negativity and punitive teacher behaviors. <i>MST</i> : randomized control trials show effectiveness with juvenile offenders.
28	Masia-Warner, C., Klein, R. G., Dent, H. C., Fisher, P. H., Alvir, J., Albano, A. M., & Guardino, M. (2005). School-based intervention for adolescents with social anxiety disorder: Results of a controlled study, <i>Journal of Abnormal Child Psychology</i> , 33 (6), 695-706.	Experimental study of 35 (n) adolescents ages 13-17 identified as socially anxious.	<i>Sample</i> : wait-list control ( $n = 17$ ) or experimental condition ( $n = 18$ ), majority female Caucasian, mean age 14.8, generalized social anxiety disorder, from parochial urban schools <i>Intervention</i> : Skills for Academic and Social Success (SASS; Masia et al., 1999), consisting of social skills training, exposure, and realistic thinking components: 12 weekly group school sessions (ca. 40 min each), two brief individual meetings (15min), and two group booster sessions. Four weekend social events (90 min) that include prosocial peers, called "peer assistants" provide real-world exposures and opportunities for skills generalization. Parents attend two group meetings (45min) at school during which they receive psycho-education regarding social anxiety and learn techniques to address their child's anxiety. Teachers participate in two psycho-educational meetings (30 min) and conduct classroom exposures supervised by group leaders. <i>Measures</i> : (at preintervention, postintervention, and 9 months) ADIS (parent and child version), Liebowitz Social Anxiety Scale; Social Phobic Disorders Severity and Change Form; Children's Global Assessment	<i>Results</i> : Treatment was superior to a waiting list in reducing social anxiety and avoidance and enhancing social functioning, as noted by independent evaluator, parent, and adolescent ratings. The outcome was not only statistically significant, but also clinically significant. 67% of the SASS group, compared with 6% in the wait-list group, no longer met diagnostic criteria for social phobia. Only 2 of 17 (11.8%) wait-list participants were classified as responders, compared to 17 of the 18 (94.4%) SASS participants. These positive effects were maintained even when study dropouts from treatment were assumed to be nonresponders. Treatment gains were maintained 9 months following intervention with indications of accrued improvement. Of the nine participants treated in the first year of the study, seven voluntarily served as peer assistants for subsequent treatment groups. Effect sizes were mostly moderate to large.  <i>Limitations</i> : Small and homogenous sample but strong methodological provisions (wait list control, blinded independent raters, measures triangulated from independent, parent and youth self-ratings). Ratings by teachers were not included because the burden was thought to outweigh

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			Scale; Social Phobia and Anxiety Inventory; Social Anxiety Scale for Adolescents; Children's Depression Inventory; Social Anxiety Scale for Adolescents: Parent Version.	benefits.
29	Massey, O.T., Armstrong, K., Boroughs, M., Henson, K. & McCash, L. (2005). MH services in schools: a qualitative analysis of challenges to implementation, operation, and sustainability, <i>Psychology in the Schools</i> , 42 (4), 361-372.	Qualitative focus group study of a Florida programs that were part of the Safe Schools/Healthy students Initiative.	<i>Participant sample:</i> 22 participants from 12 programs. Participants included both service-providing staff working with students directly and more senior program supervisors. Also included were social workers, counselors, and school psychologists. Focus groups were conducted in groups of 5-6, and lasted 90 minutes. Programs were distinguished as either being prevention or intervention oriented, and as either being staffed by external, community-based personnel or by internal, school-system employees. Similarities and differences in service providers' experiences. Issues of interest in the focus groups were framed as: (a) challenges and supports within the school system for program operation, (b) the perceived value of programs, (c) standards of accountability, (d) the flexibility or responsiveness of programs to school needs and their ability to change over time, and (e) capacity for sustainability	<i>Findings:</i> Challenges to School Integration ranging from difficulties obtaining needed resources and materials to difficulties identifying appropriate staff contacts and to gaining visibility and status for their program effort. The latter was particularly salient among community provider with regard to obtaining status and legitimacy in the school setting. A program's successful integration depended on the support of a school administrator. A lack of communication among the programs was a common theme for both internal and external providers, but isolation within the school district, difficulty developing contacts and lack of clarity about who to contact, were recurring themes for only the external providers. Of serious concern were differences about informed consent. This issue included how to go about obtaining consent from students and their parents, the need to educate teachers of the significance of parental consent before treatment and consultation, and maintaining confidentiality in the school environment. Marked differences were found among programs regarding the sustainability. External programs strove to maintain the integrity of program efforts by protecting the service unit. Internal programs sought to sustain their efforts by dissemination of program concepts and practices. Internal program participants voiced fewer problems with accessibility and acceptance, they were more readily accepted by teachers, principals, and other decision makers, appeared more aware of the school culture and knew how to navigate the system.
30	Merry, S., McDowell, H, Wild, C.J., Bir, J., & Cunliffe, R. (2004). A Randomized Placebo-Controlled Trial of a School-Based Depression Prevention Program, <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 43 (5), 538-	Experimental study of 392 (n) students ages 13-15 in New Zealand, randomized into RAP-Kiwi intervention programs or placebo control programs run by teachers.	<i>Sample:</i> 176 male and 188 female students were recruited from two schools one from lower socioeconomic urban area; the other from a middle-class rural district, both serving a population almost purely Maori and Pakeha (British decent). <i>Intervention:</i> a universal school intervention (though self-selected participation) based on manualized 11 session-program (RAP) designed in Australia and adjusted for New Zealand populations (RAP-Kiwi). The program incorporates cognitive-behavioral and interpersonal therapy principles. Placebo interventions consisted of classes with arts/	<i>Results:</i> The experimental condition had a small but statistically significant effect. Students in the experimental group lowered their depression scores more than students in the placebo group. 16 RAP Kiwi students improved, and 5 deteriorated, (156 remained in the same Beck category). In the placebo group 139 remained the same, 6 improved, 9 deteriorated. After 18 months RADS depression scores stayed below baseline in both groups (though not Beck scores). Students evaluated both intervention and placebo as reasonable enjoyable and useful although the placebo scores were slightly better on both items. Teachers were less positive about the program since they did not like being tied to a

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	547.		<p>crafts activities also using a manualized curriculum. To fit the school timetable, in one school the program was run twice a week in year 9 (13-year-olds) and in the other it was run weekly in year 10 (14-year-olds).  <i>Measures:</i> Two well established depression scales (Beck, and Reynolds Adolescent depression scale); student satisfaction with program (enjoyment and usefulness).</p>	<p>manualized approach. Students remained blinded as to their group assignment (at the end overall only 11% guessed correctly which intervention they had received)  <i>Limitations:</i> Teacher training may have been limited, teachers were not blinded as to the group, teacher characteristics and delivery were not evaluated.</p>
31	<p>Nabors, L.A. &amp; Prodent, C. A. (2002). Evaluation of outcomes for adolescents receiving school-based MH services, <i>Children's Services: Social Policy, Research and Practice</i>, 5 (2), 105-112.</p>	<p>Quasi-experimental study of 133 (n) students ages 11-18 in urban, lower socio-economic area of Baltimore, MD.</p>	<p><i>Sample</i> (at 12 months follow-up): 79 (n) students in the intervention group received SBMH services; 54 in comparison group did not. In both subsamples African-American boys were the majority.  <i>Interventions:</i> Various services of school-based programs including individual, group, and family approaches, referrals, crisis intervention etc.  <i>Measures:</i> diagnosis and Global Functioning Assessment, Child and Adolescent Functional Assessment Scales (CAFAS), Youth Self Report (YSR), My Counselor's attitude questionnaire, Youth Satisfaction with Counseling Questionnaire (YSCQ).</p>	<p><i>Results</i> indicate improved functioning scores for the treatment group. However, these improvements do not amount to clinically significant changes. Boys in SBMH services reported slightly higher improvements than those in comparison groups, whereas all girls (in either group) showed improvements (likely the effect of maturation).  <i>Limitations:</i> small sample size, no randomized control, non-equivalent comparison groups, no data on students who dropped out of school (and services).</p>
32	<p>Nabors, L.A., Weist, M. D. Reynolds, M. W., Tashman N. A, &amp; Jackson, C.Y. (1999). Adolescent Satisfaction with School-Based MH Services, <i>Journal of Child and Family Studies</i>, 8 (2), 229-236.</p>	<p>Survey study of 71 (n) students in urban area, either receiving school-based MH services (n=35) or enrolled in "Futures" a drop out school failure prevention program (n=36).</p>	<p><i>Sample:</i> SBMH subsample: 25 female, 27 African American, 8 Caucasian. Ages ranged from 14 to 18 years (<math>M = 15.9</math>).          Futures Program: 22 female, 32 African American, 4 Caucasian. Ages ranged from 15 to 19 years (<math>M = 16.3</math>). Overall students had been receiving school- or community-based MH services from 2 months to 8 years.  <i>Interventions:</i> Students were seen by five Caucasian therapists of whom four were female. No further information provided.  <i>Measures:</i> (1) Client satisfaction survey developed for the study in which students defined what satisfaction meant to them and listed reasons for satisfaction/dissatisfaction.          (2) Client Satisfaction Questionnaire (CSQ-8), designed to assess global satisfaction with MH services.</p>	<p><i>Results:</i> Students were overall satisfied.. They typically defined satisfaction as being happy with something (42%) or getting what they needed or wanted (35%); Students reported being satisfied with their MH services because: (1) they were involved in a caring relationship with someone they trusted (35%); (2) it provided emotional release (31%); and (3) it was a place to learn new interpersonal and/or coping skills (14%). Students reported feeling dissatisfied when counseling sessions were too short or their counselor could not see them immediately when they had a problem (37%). Thirty-two percent were not dissatisfied with anything. Clinician training and availability, student grades, and class impacted adolescents' ratings of satisfaction on the CSQ-8. For example, students in therapy with licensed psychologists reported higher satisfaction than those in therapy with psychology trainees. Juniors and Seniors reported feeling more satisfied with therapy than Freshmen and Sophomores. There was a trend for students with higher grades to feel less satisfied than those with lower grades.  <i>Limitations:</i> small urban samples, not standardized survey, students who dropped out of services were not included.</p>
33	<p>Owens, J.S, Richerson, L., Beilstein, E.A., Crane,</p>	<p>Experimental study of the Youth Experiencing</p>	<p><i>Sample:</i> 30 (n) students in experimental and 12 (n) in waitlist group majority male, referred for ADHD and</p>	<p><i>Results:</i> Outcomes are positive but did not yield strong effects. Ratings from parents indicate positive trends for the</p>

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	A., Murphy C.E., & Vancouver, J.B. (2005). School-based mental health programming for children with inattentive and disruptive behavior problems: first year treatment outcome, <i>Journal of Attention Disorders</i> , 9 (1), 261-274.	Success (YESS) program with elementary school children in rural southeast OH. (Random assignment of schools, not individuals)	ODD. Ethnicity not given. <i>Intervention:</i> YESS is a treatment package containing CB methods for daily report cards, parent education, coordination of care, individual child sessions, teacher training and consultation. Clinicians were on site 20hrs/week, met bi-weekly with teachers for scheduled times and were available on the spot as needed. <i>Measures</i> at three points during school year: DBD rating scale (symptoms, parent and teacher rating); IRS rating scale of perceptions (parent, teachers); CBCL; feasibility; and satisfaction	treatment group whereas the control group ratings indicate a worsening of symptoms. Results for the two groups were statistically significant ( $p < .10$ ) for ODD, peer relations, and aggression. Ratings from teachers indicate positive treatment effects for attention and grades. The main effect in several areas consisted of treatment participants not declining in functioning over time whereas control group children did.  <i>Limitations:</i> Small sample, high number of missing data for parent ratings, no longer term follow up.
34	Passaro, P.D., Moon, M., Wiest, D. J., & Wong, E.H. (2004). A model for school psychology practice: addressing the needs of students with emotional and behavioral challenges through the use of an in-school support room and reality therapy, <i>Adolescence</i> , 39 (155), 503-517.	Uncontrolled pilot study of 10 (n) male students (middle school age) with multiple psychological diagnoses.	<i>Sample:</i> boys with emotional disorders (a variety of multiple diagnoses including ADHD, CD, ODD etc.), all initially served in special day class. Ages, ethnicity, and other data not given. <i>Intervention:</i> Reality therapy and in school support room <i>Measures:</i> daily behavior logs, out-of-school suspensions, time spent in regular classroom	<i>Results:</i> Though average behavior improved, none of the students moved to less restrictive placement, decrease in out of school suspensions (12%).  <i>Limitations:</i> small sample, few descriptors of sample, no control or comparison, measures not standardized.
35	Phillips, R. & Gregory, P. (2004) Community resources for families program—using client outcomes to measure program success. In Robinson (Ed.), <i>Advances in School-Based MH Interventions</i> . Kingston, NJ: Civic Research Institute, Chapter 16.	Description of statewide Community Resources for Families (CRFF), an SBMH effort in Idaho, and results of an evaluation of program effectiveness	Funded by Idaho Department of Health and Welfare, schools hire Community Resource Workers for elementary schools to identify children who are underperforming due to unmet emotional or physical needs. CRW provide up to 30 days of home-based assessment and referral services as well as emergency assistance to families who wish to participate. Emergency services allow for an additional 90 days of case management services, and flexible funds. For a random sample of 206 (n) clients who had received emergency services a mixture of data measures were reviewed and analyzed to assess increased child safety, increases in school readiness, and increase in family self-reliance.	<i>Results</i> indicate that referred children lacked physical and emotional needs, and there is some support to conclude that families accept referrals to community resources and become more active participants in meeting children's needs. Interviews with school staff and case file analysis indicated improvements in children's school readiness including higher grades, improved attendance and behaviors. Self reliance measures showed increased employment rates in families, improved housing situations, higher enrollment in medical insurance, and more contacts with community resources even after the program ended. <i>Limitations:</i> Representativeness of random sample for served population was not established. Mixed methods of assessment include non standardized measures, no comparison groups.
36	Poessel, P., Baldus,, C., Horn, A.B., Groen, G. &	Experimental study of a universal program for adolescent depression in	<i>Sample:</i> 303 (n) students (experimental n = 163; control n= 116), majority male, <i>Intervention:</i> LISA, manualized CBT prevention	<i>Results:</i> participants of the prevention program remained on a low level of depressive symptoms and had larger social network sizes, while the control group showed

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	<p>Hautzinger, M. (2005). Influence of general self-efficacy on the effects of a school-based universal primary prevention program of depressive symptoms in adolescents: a randomized and controlled follow-up study, <i>Journal of Child Psychology and Psychiatry</i>, 46 (9), 982–994.</p>	<p>Germany.</p>	<p>program focused on social competence building. 10-weeks weekly meetings of 1.5 hours, students separated by gender. Thus, intervention groups varied in size from 8 to 24 students. No teacher was allowed to participate or remain in the classroom during sessions because students are likely to be socialized with the teacher’s academic role, which is associated with achievement orientation. <i>Measures</i> at pre, post treatment and 3 months follow up: Center for Epidemiological Studies Depression Scale (CES-D) (self-report); Automatic Thought Questionnaire; Questionnaire of Social Support; General Self-Efficacy Scale; Bremen Youth’s Event List (BJL) (life events); Daily Hassles and Daily Uplifts Questionnaire; Evaluation of program.</p>	<p>increasing amounts of depressive symptoms and a reduced use of social network, especially in the low self-efficacy group. Participants low on self-efficacy benefited most from LISA and showed significantly fewer depressive symptoms than comparable controls in the 3-month follow-up. Effect sizes for social network were close to zero, and no impact could be found for dysfunctional thought.</p> <p><i>Limitations:</i> short term follow up only, sole use of students’ self-reports.</p>
<p>37</p>	<p>Reddy, L.A. &amp; Richardson, L. (2006). School-Based Prevention and Intervention Programs for Children with Emotional Disturbance, <i>Education and Treatment of Children</i>, 29 (2), 379-404.</p>	<p>Description of three exemplary SBMH programs for children with ED, based on literature review of 26 studies.</p>	<p>Three programs were selected based on five criteria: (a) program was designed specifically for children at-risk for or with ED, (b) program focused on academic and behavior outcomes, (c) outcome data for each program was available, (d) each program had at least three published outcome studies (including follow-up data); and (e) each program was nominated by experts in the field of school psychology and child mental health as an excellent program. Two prevention programs, First Step to Success (Walker et al., 1998) and Parent Teacher Action Teams (PTAR; Kay &amp; Fitzgerald, 1997) and, one intervention program Integrated Mental Health Program (IMHP; Roberts, Jacobs, Puddy, Nyre, &amp; Vernberg, 2003) were selected.</p>	<p><i>First Step to Success</i> is a home and school prevention program for at-risk kindergartners with early signs of antisocial behavior such as difficulties with peer and teacher relationships, aggressive and disruptive behavior, and internalizing behaviors such as anxiety, inattention, and withdrawn behavior in the classroom. It has been used in 12 states, three Canadian provinces, Australia and New Zealand. The primary objective is to train at-risk children (preschool through third grade) to interact appropriately with peers and adults at school to prevent the development of long-term and more serious anti-social behavior patterns. It includes three modules: a proactive universal screening process; consultation-based school intervention with the child, peers, and teacher; and intensive parent training focused on improving academic performance and adjustment. <i>Parent Teacher Action Research</i> (PTAR), is a primary prevention program for children at-risk for antisocial behavior patterns in elementary school. It provides whole-class social skills instruction and universal screening to all students, allows for teachers’ choice of social skills curricula, team’s choice of interventions for an individual child. This flexible approach permits the PTAR team to customize a program around the child’s needs. The team includes individuals involved in the child’s life at home and school. PTAR is an effective model for fostering home and school collaboration which emphasizes and mandates parent involvement (making</p>

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				it difficult when parents choose not to be involved). <i>Intensive Mental Health Program (IMHP)</i> is an intervention program for elementary children, designed to increase access to mental health services, and promote interdisciplinary training. It is an innovative self-contained program developed out of a collaborative partnership between Lawrence, Kansas Public Schools and the Clinical Child Psychology Program at the University of Kansas. Tailored to the individual child and the program includes psychosocial interventions, group and individual therapy, social skills and relaxation training, behavior management programs and the use of medication.
38	Robinson, K.E. & Rapport, L.J. (2002). Outcomes of a school-based MH program for youth with serious emotional disorders, <i>Psychology in the Schools</i> , 39 (6), 661-675.	Pre-post test study of a comprehensive, day treatment program conducted in Utah public school classrooms for 142 (n) children (ages 5-17) with serious emotional disorders (SED).	<i>Sample:</i> 79% boys; 65.3 % Caucasian, 4.9% Black; 49% elementary school, 51% junior HS/ HS; 77% disruptive disorders (ODD, ADHD etc.), 21% mood disorders. <i>Intervention:</i> Valley MH (VMH) day treatment model provides a multimodal, multidisciplinary program using a dual focus of reducing behavioral excesses (e.g., physical/ verbal aggression, inattention, and noncompliance) and increasing behavioral skills (e.g., ability to identify and verbalize emotions in self and others, impulse control, and completion of tasks). <i>Measures:</i> Youth Outcome Questionnaire (YOQ) (64-item, standardized parent-completed checklist); collected at baseline, and 3, 6, and 9 months follow up.	<i>Results:</i> Both elementary and adolescent age groups improved significantly with treatment but showed different patterns of improvement over time. Over 50% of the sample showed overall symptom reduction, and more than 25% of the sample scored below clinical cutoff levels. Still 75% scored within the range of clinical intervention at the final assessment, through only few had deteriorated. Treatment response was equally likely among boys and girls, across diagnostic categories and in treating internalizing and externalizing symptoms. Younger students improved significantly during the first three months in the program while adolescents improved significantly in their 3-6 months time interval. <i>Limitations:</i> only parent ratings, no comparison or control groups, baseline was established through archival data, follow-up only 9 months.
39	Robinson, K.E. (2004). Moving psychiatric day treatment services from the hospital to a school-based MH program. In Robinson (Ed.), <i>Advances in School-Based MH Interventions</i> . Kingston, NJ: Civic Research Institute, Chapter 17.	Description of Valley MH day treatment program, Utah, delivered in public classroom settings, and outcomes for 124 (n) students (79% boys) with SED in elementary, middle, and high school classrooms.	The Valley MH program implements academic and MH treatment components into day treatment classroom settings that are “indistinguishable from regular education classrooms for the casual observer” (p.17-4). Guided by a multidisciplinary MH team (psychiatrist, social workers, psychologists and behavioral aides) each 24 student classroom receives services from a clinical social worker and behavioral specialist, a special education teacher and an academic aide. Components rest on behavioral modification including a token system, individualized behavioral contracts, social skills training, and family therapy.	<i>Outcomes</i> for a sample of 124 (n) students indicate a significant reduction in symptoms as measured by the Youth Outcome Questionnaire, a standardized parent checklist. A survey of consumer satisfaction asked participants about access to, and appropriateness of treatment, family involvement, cultural sensitivity and clinical outcomes. Youth and parents rated the program as acceptable, with youth being slightly less satisfied than parents.  <i>Limitations:</i> no comparison groups, no triangulation of outcome data (parent report only)
40	Rones, M., & Hoagwood, K. (2000). School-based MH services: A research review. <i>Clinical Child and</i>	Review of research on SBMH including 47 (n) studies that used either experimental, quasi-	Review is organized around the type of problem for which the service was targeted (EBD; Depression, Conduct Problems, Stress, Substance Use) discussing universal, and indicated interventions	<i>Results:</i> There is a robust group of school-based MH programs that evidenced an impact across a variety of emotional and behavioral problems in children. Overall, however, there is also a lack of treatment studies that targeted

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	<i>Family Psychology Review</i> , 3 (4), 223–241	experimental (with matched comparison) or multiple baseline designs, employed standardized measures and offered pre-post test results.	for each area.	particular clinical syndromes, even among the most prevalent disorders of childhood (i.e., anxiety, ADHD, depression) or the group most needing assistance (students with EBD). The strongest evidence of impact had those programs that were directed toward changing specific behaviors and skills. (Identified research studies were dominated by CBT/ social skills approaches) Important features of the <u>implementation</u> process that increase the probability of service sustainability and maintenance include (i) consistent program implementation; (ii) inclusion of parents, teachers, or peers; (iii) use of multiple modalities (e.g., the combination of informational presentations with cognitive and behavioral skill training); (iv) integration of program content into general classroom curriculum; and (v) developmentally appropriate program components.
41	Schaeffer, C.M., Bruns, E., Weist, M., Stephan, S.H., Goldstein, J. & Simpson, Y. (2005). Overcoming Challenges to Using Evidence-Based Interventions in Schools, <i>Journal of Youth and Adolescence</i> , 34 (1), 15–22.	Findings based on a review from the Center for School MH Assistance at the University of Maryland about evidence-based prevention and treatment programs that can be used by school MH clinicians	(1) Overview of EBP: EBP can be costly to implement when manuals, training etc. must be purchased. Most EBP contain CBT approaches are time limited (5-20 sessions) and employ group modalities. In contrast to treatment approaches, evidence-based <u>preventive</u> interventions for youth tend to focus on broader skills and are administered in classrooms by classroom teachers (with support from MH professionals) rather than MH providers. (2) EBP appropriate for use by school MH providers (see next column) (3) Challenges (see next column) (4) Overcoming barriers (see next column)	To date, there has been no comprehensive review of programs suitable for use by school MH professionals. “Expanded” school MH (ESMH) programs augment limited services for youth in special education to move toward a full continuum of MH promotion and intervention for youth in general and special education through school-community program partnerships. The goal of this review was to identify universal, selected, and indicated (treatment) interventions that could be implemented “as is” or with minimal adaptations. Challenges typically include: logistics (such as finances, training, quality assurance), finding and choosing an appropriate program, organizing meetings and sharing materials between involved parties (teachers from various schools, MH professionals etc.); acceptability of protocols for diverse populations (cultural, diagnostic, age, gender etc.); overcoming resistance from students, parents and teachers. Barriers can be overcome through fostering favorable conditions (such as attitudes and intents, requisite skills, absence of constraints), through involvement of stakeholders throughout the process, introducing ideas, component training etc. slowly and stepwise.
42	Slade, E. P. (2002). Effects of School-Based MH Programs on MH	Study explores data from the National Longitudinal Study of Adolescent	<i>Sample</i> : involves information from 1995 about MH services use in the preceding year taken from a representative, ethnically diverse sample of middle and	<i>Results</i> : schools that offer on-site services significantly (modestly) increase the probability of using MH counseling services, and access to school-based counseling does not

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	Service Use by Adolescents at School and in the Community, <i>MH Services Research</i> , 4 (3), 151- 166.	Health (Add Health;) to determine if school-based MH programs (1) increased adolescents' access to MH counseling services; (2) complement or substitute for MH services outside of school; and (3) are concentrated among students from racial minorities, who are more likely to have unmet MH care needs?	high school students (n > 18,000). Overall, on-site MH counseling services are available to approximately three out of every five adolescents who attend school. Latino, African American, Asian, American Indian, and students in the "Other" race category are more likely to have counseling services available at school than are non-Latino, White students, whereas American Indians are less likely to have MH counseling available at school.	differ significantly by race. Only few students used both school and non-school MH services (mostly SpEd and minority students). Overall services seemed to function neither as substitutes nor as complements but run parallel.  <i>Limitations:</i> ADD Health data is rather broad not accounting for quality of services, or possible effects of insurance coverage on service use patterns.
43	Vernberg, E.M., Jacobs, A.K., Nyre, J.E., Puddy, R.W., & Roberts, M.C. (2004). Innovative Treatment for Children With Serious Emotional Disturbance: Preliminary Outcomes for a School-Based Intensive Mental Health Program, <i>Journal of Clinical Child and Adolescent Psychology</i> , 33 (2), 359–365.	Preliminary evaluation (pre-/ post test) of a school-based Intensive Mental Health Program (IMHP) for 50 (n) elementary school children (ages 5-13) with severe, early-onset, serious emotional disturbances (SED).	<i>Sample:</i> 42 boys, 8 girls with severe mental health problems and poor functioning (excluding children with mental retardation or autism); 70% Caucasian, 16% African-American, 8% Native American; 70% with a history of serious difficulties in their family functioning. <i>Intervention:</i> collaboration between university-based clinical child psychologists and the special education division of a public school system. therapeutic classrooms operating 3 hrs/day; support and consultation for educators, other service providers, and caregivers; behavior management. Individualized treatment (varied in length 1-48 months, mean: 12 months; treatment ended when child transitioned out of day class) guided by nine principles (see next column). <i>Measures:</i> CAFAS	<i>Results:</i> Children showed statistically and clinically significant improvements in overall functioning, including role performance at school, reduction of symptoms in behaviors toward others, self-harm, mood, and thinking. The scores for child rearing environment did not change significantly. <i>Limitations:</i> No control or comparison group, no follow up after completion of treatment. [Nine Principles: 1. maintain placement in the child's home and neighborhood school ; 2. emphasize an evidence-based approach; 3. focus on cognitive and behavioral skill development; 4. attend to cross-setting linkages and the interrelationships among school, after-school settings, and home; 5. emphasize generalization and maintenance of skills; 6. collaborate with everyone involved, gain consensus on goals and treatment strategies; 7. view assessment and diagnosis as an ongoing process; 8. maintain a developmental focus; 9. cultivate an authoritative parenting (developmentally appropriate expectations coupled with warmth and positive attention).]
44	Walker, H.M., Golly, A., McLane, J.Z., & Kimmich, M. (2005). The Oregon First Step to Success Replication Initiative: Statewide Results of an evaluation of the program's impact, <i>Journal of Emotional and Behavioral Disorders</i> , 13	Quasi experimental study of the First Step Early intervention program with 211 (n) children grades K through 2 in OR conducted by outside researchers.	<i>Sample:</i> 181 (n) students in experimental group; 30 in non- equivalent comparison group. No further details on sample characteristics are provided. <i>Intervention:</i> described above, see Reddy, L.A. & Richardson, L. (2006). <i>Measures:</i> Systematic Screening for Behavior Disorders; CBCL; direct observations of academic engaged time (AET); parent and teacher satisfaction surveys	<i>Results</i> indicate results somewhat similar to earlier studies although implementation fidelity and research methodology were not as tightly controlled in this study. Data show statistically significant improvements from pre- to post treatment for aggression, adaptation and academic engagement. Improvements are markedly higher for the experimental group. <i>Limitations:</i> no random assignment, non-equivalent comparison group.

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45	<p>(3), 163-172.</p> <p>Weist, M.D., Sander, M.A., Walrath, C., Link, B., Nabors, L., Adelsheim, S., Moore, E., Jennings, J., &amp; Carrillo, K. (2005). Developing Principles for Best Practice in Expanded School Mental Health, <i>Journal of Youth and Adolescence</i>, 34 (1), 7–13.</p>	<p>Survey study identifying 10 principles of best practices.</p>	<p>A set of BP principles was derived from literature and existing guidelines of CASSP and the National Assembly of School-Based Health Care. The principles were presented for feedback to a first <i>sample</i>: 428 (n) people (majority: female professionals) with some involvement in school mental health from diverse backgrounds (e.g., mental health, education, school mental health, and family members). Revisions were made according to feedback.</p> <p>Revised principles were presented to a <i>second sample</i> of 86 (n) stakeholders (majority: female professionals) from different groups who rated principles as to their importance on a six-point Likert scale.</p>	<p><i>Results:</i> All principles were rated as important (5.1 and higher on a six point scale) by both samples. The revised version received overall higher endorsements. The 10 principles of BP in Expanded school MH are (revised version):</p> <ol style="list-style-type: none"> <li>1. All youth and families are able to access appropriate care regardless of their ability to pay.</li> <li>2. Programs are implemented to address needs and strengthen assets for students, families, schools, and communities.</li> <li>3. Programs and services focus on reducing barriers to development and learning, are student and family friendly, and are based on evidence of positive impact.</li> <li>4. Students, families, teachers and other important groups are actively involved in the program’s development, oversight, evaluation, and continuous improvement.</li> <li>5. Quality assessment and improvement activities continually guide and provide feedback to the program.</li> <li>6. A continuum of care is provided, including school-wide mental health promotion, early intervention, and treatment.</li> <li>7. Staff hold to high ethical standards, are committed to children, adolescents, and families, and display an energetic, flexible, responsive, and proactive style in delivering services.</li> <li>8. Staff are respectful of, and competently address developmental, cultural, and personal differences among students, families and staff.</li> <li>9. Staff build and maintain strong relationships with other mental health and health providers and educators in the school, and a theme of interdisciplinary collaboration characterizes all efforts.</li> <li>10. Mental health programs in the school are coordinated with related programs in other community settings.</li> </ol>
46	<p>Wilson, S. J., Lipsey, M. W., &amp; Derzon, J. H. (2003). The effects of school-based intervention programs on aggressive behavior: A meta-analysis. <i>Journal of Consulting and Clinical Psychology</i>, 71, 136–</p>	<p>Meta-analysis of school based program studies which included outcome measures of aggressive behaviors (i.e. program did not have to be focused on aggression as long as it included measures of such</p>	<p>Analysis of 221 (n) studies distinguishes between demonstration programs (implemented and evaluated by a researcher and typically not available without the interest of the researcher) and routine practice programs (of which they found very few in the empirical literature).</p> <p>Analysis examined <i>change in aggressive behavior</i> over the time periods by calculating separate pre-post treatment effect sizes for each experimental and each</p>	<p><i>Results:</i> All effect sizes for intervention groups were higher than those for control conditions. Nontreated groups did not show any naturally occurring changes in aggression. The effect of successful interventions, therefore, was to reduce the level of aggressive behavior from the stable levels that would otherwise continue. This pattern indicates that the role of school-based programs is not so much to prevent potential increases in aggressive behavior as to reduce the levels that are already occurring. Effect sizes were higher for randomized</p>

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149.	behaviors).	<p>control group which allowed for caution inclusion of studies with no control group (24% of studies) and resulted in a total of 522 separate student samples (only 26 from routine practice programs).</p> <p><i>Sample characteristics:</i> majority boys, most programs lasted less than 20 weeks, (20% less than 7 weeks), 52% had weekly contact, most had less than 50 hours of total contact time, most used group formats.</p>	<p>studies but did not differ significantly from non-randomized designs. Effects for the few routine programs were overall quite small and considerably smaller than those produced by the demonstration programs. The mean difference between pre–posttest change for intervention and control groups for all the demonstration programs produced an estimate of .25 for the effect size on aggressive behavior. Overall, different intervention strategies produced similar effects (behavioral approaches and counseling showed the largest effects, social competence training with and without cognitive–behavioral components followed close behind, and multimodal and peer mediation programs showed the smallest effects). Key advantages from successful interventions were related to being well implemented and relatively intense, using one-on-one formats, and being administered by teachers.</p>
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