

## Practice Parameter for Psychiatric Consultation to Schools

### ABSTRACT

This practice parameter reviews the topic of psychiatric consultation to schools. The review covers the history of school consultation and current consultative models; the process of developing a consultative relationship; school administrative procedures, personnel, and milieu; legal protections for students with mental disabilities; and issues typically arising in consultative situations. The objective of the parameter is to provide an introduction to the special vocabulary, knowledge, and skills that are important prerequisites for successful consultation in school settings. *J. Am. Acad. Child Adolesc. Psychiatry*, 2005;44(10):1068–1084. **Key Words:** practice parameters, practice guidelines, child and adolescent psychiatry, mental health in schools, school consultation.

Epidemiological data suggest that 9% to 13% of children and adolescents in the United States, representing 6 to 9 million young people, have a mental disorder associated with significant functional impairment

(Friedman et al., 1996). Yet, it is estimated that only one fifth of young people who need mental health services receive them, and a much smaller proportion receives services from a child and adolescent psychiatrist (Burns et al., 1995).

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Failure to identify youths in need of mental health services and lack of timely, convenient access to skilled clinicians make up two of the major barriers to the provision of psychiatric assessment and treatment for children and adolescents. Because an estimated 95% of all American youths are enrolled in schools, this venue is viewed as a logical point of entry into mental health services for young people (Allensworth et al., 1997).

Certain groups of students may be especially in need of services because of high rates of undetected and/or untreated psychopathology. These groups include students receiving special education services for learning or emotional disabilities (Garland et al., 2001), as well as mainstream students whose academic performance is hindered because of excessive absenteeism, multiple disciplinary actions, or slow learning (Mattison, 2000). Untreated psychiatric disorders also may contribute to older students' involvement in risky behaviors such as substance use, physically aggressive conflict resolution, early, unprotected sexual intercourse, and suicide attempts (Flisher et al., 2000).

Psychiatric consultation to schools can greatly facilitate the early identification and referral of troubled students, thereby helping to reduce the barriers to mental health services encountered by these children.

Moreover, psychiatric consultants can partner with schools in a broader effort to help schools develop policies and procedures that can enhance mental health throughout the school community. In so doing, consulting psychiatrists can play a major role in improving students' chances for a successful educational experience (American Psychiatric Association, 1993). In this practice parameter, "psychiatrists" refers to psychiatrists who evaluate and treat children or adolescents on a regular basis.

## METHODOLOGY

The list of references for this parameter was developed by searches of *Medline* and *PsycINFO*, by reviewing the bibliographies of book chapters and review articles, and by soliciting source materials from colleagues with expertise in school consultation. The search covered the period 1995 through 2003 and yielded approximately 200 articles and chapters. Full-length books also were reviewed. Each of the references was reviewed and only the most relevant were included in this document. References that are particularly salient have been marked with an asterisk.

## BRIEF HISTORY

For more than a century, clinicians have collaborated with school personnel to improve the mental health of students. In 1896, one of the first school consultations recorded in a professional journal described a psychologist's advice to a teacher about the treatment of a student with mental retardation (Witmer, 1896). Anna Freud, originally trained as a teacher, consulted with teachers in Vienna in the 1920s to enhance their understanding of psychological aspects of classroom dynamics and individual student behavior (Freud, 1930). Since the 1950s, a number of psychiatrists have made seminal contributions to the interface between psychiatry and education, notably Caplan (1970), Berlin (1975), Comer (1992), and Berkovitz (1998, 2001).

Psychiatric consultation to schools originally focused on helping school personnel to be more sensitive to general mental health issues arising among students, teachers, and administrators. Issues typically addressed in this type of consultation included teacher/administrator conflicts, teacher morale problems, parent dissatisfaction, student attitude problems, and poor interdepartmental communication.

Over time, the focus of school consultation shifted to the specific needs of individual students. Consulting psychiatrists began to conduct assessments of individual students and to recommend or even provide treatment. This shift in emphasis and variability in delivery gave rise to complicated new questions of reimbursement, consent, confidentiality, boundaries, duty of care, and conflict of interest.

Today, psychiatrists provide consultation to schools in a variety of ways. Probably the most common consultative role is one in which parents seek a psychiatrist's recommendations for their child's school-based service needs. In such a situation, psychiatrists communicate the findings from their assessment of the child to school personnel, and make recommendations for school-based educational and related services that would supplement their office-based treatment. A less common consultative role is one in which psychiatrists are employed by a school to assess students who are problematic and recommend services. In this situation, psychiatrists typically will not provide treatment but instead will communicate the findings from their assessment to school personnel and make recommendations for appropriate clinic- and school-based services. A third and increasingly common role is one in which psychiatrists provide direct assessment and treatment services to students in school-based or school-linked mental health clinics (e.g., Jennings et al., 2000). This arrangement has the distinct advantage of surmounting access barriers and supplementing in the clinic the limited mental health resources traditionally available in schools.

In addition to providing consultation around individual students ("case consultation"), psychiatrists increasingly are being asked to advise schools about general mental health issues ("systems consultation"), including creating school environments that are conducive to mental health, valuing diversity in the school, developing programs designed to prevent mental health problems, implementing systems of early identification and referral, and managing crisis situations. In recent years, several expanded consultation models that combine both case and systems consultation and include collaboration with multiple community agencies are gaining prominence (for examples, see Adelsheim, 2000; Rappaport, 2001; Weist, 1997).

Irrespective of the type of consultation that the psychiatrist provides to schools, the information contained in this parameter should be useful to the clinician

desiring a successful consultative relationship. Other mental health professionals who consult to schools may also find these suggestions helpful. Additional technical assistance for the consulting professional can be obtained through the Center for Mental Health in Schools at the University of California at Los Angeles (<http://smhp.psych.ucla.edu>) and the Center for School Mental Health Analysis and Action at the University of Maryland (<http://csmha.umaryland.edu>).

## RECOMMENDATIONS

Each recommendation in this parameter is identified as falling into one of the following categories of endorsement, indicated by an abbreviation in brackets after the statement. These categories indicate the degree of importance or certainty of each recommendation.

[MS] *Minimal standards* are recommendations that are based on substantial empirical evidence (such as well-controlled, double-blind trials) or overwhelming clinical consensus. Minimal standards are expected to apply more than 95% of the time (i.e., in almost all cases). When the practitioner does not follow this standard in a particular case, the medical record should indicate the reason.

[CG] *Clinical guidelines* are recommendations that are based on empirical evidence (e.g., open trials, case studies) and/or strong clinical consensus. Clinical guidelines apply approximately 75% of the time. These practices should always be considered by the clinician, but there are exceptions to their application.

[OP] *Options* are practices that are acceptable but not required. There may be insufficient empirical evidence to support recommending these practices as minimal standards or clinical guidelines. In some cases, they may be the perfect thing to do, but in other cases they should be avoided. If possible, the practice parameter will explain the pros and cons of these options.

[NE] *Not endorsed* refers to practices that are known to be ineffective or contraindicated.

### Recommendation 1. Psychiatrists Should Understand How to Initiate, Develop, and Maintain Consultative Relationships with Schools [CG]

Psychiatrists seeking to develop consultative relationships with schools may begin by offering their services on a volunteer basis; for example, giving a presentation

at a parent association meeting or at a school staff development conference. These activities will allow school personnel to become familiar with, and develop trust and confidence in, the psychiatrist's abilities. Alternatively, psychiatrists can contact community agencies or other service providers to determine whether preexisting relationships with a school can facilitate access. The latter approach has the advantage of placing the proposed consultancy in the context of a community-wide effort to reduce barriers to learning among students (Adelman and Taylor, 2000; Taylor and Adelman, 2000). If a school wishes to employ a consulting psychiatrist, a written plan should be developed detailing the terms of the professional relationship, including role, reimbursement, availability, and logistical arrangements. The scope of the consultant's duties should be clearly specified, so that school personnel are clear about when, for what purpose, and under what circumstances they can contact the psychiatrist. There should be clear expectations for the time frame of the consultation. If the consultation is for assessment only, then it should be clear who will be responsible for arranging and providing treatment, if recommended by the consultant.

Consulting psychiatrists should always remember that they are guests in a system in which other professionals function with a high level of expertise. The psychiatrist should enter this system with an attitude of courteous, respectful collaboration and a sincere willingness to help rather than direct. According to Bostic and Rauch (1999), three general objectives should guide the psychiatrist in the development of a successful consultative relationship with a school: first, to strengthen the relationships of all professionals involved in a student's educational progress, both within and outside of the school system; second, to foster recognition of dynamic forces that may impede the student's progress by ascertaining student, parent, and staff concerns and needs; and third, to help school staff generate responses to problems by teaching new skills and finding common goals.

### Recommendation 2. Psychiatrists Should be Knowledgeable About School Administrative Procedures, School Personnel, and the Sociocultural Milieu of the School [CG]

Public, private, and parochial schools have differing types of governance, with public and private schools typically accountable to an elected board and parochial

schools to their religious entity. School boards generally are charged with fiscal responsibility for the schools in their purview and, as such, can exert considerable influence over the allocation of funds and resources for external consultants and programs.

In public schools, the special education administration is responsible for implementing the state's interpretation of the federal educational rights legislation, as delineated in the state's administrative or school code. Special education administrators and school administrators may have competing agendas because special education administrators often are responsible for determining the special education needs of a student, whereas school administrators may be concerned about finding adequate resources to meet those needs.

The professional staff of schools typically comprises administrators, regular and special education teachers, and support services staff, which may include a nurse, guidance counselor, psychologist, social worker, or resource officer. In many situations, support services staff are employed on a part-time basis and have narrowly defined responsibilities within the school (e.g., health maintenance for nurses, academic/vocational counseling for guidance counselors, psychoeducational testing for psychologists, individual/family/group therapy for social workers, and school security for resource officers). The consulting psychiatrist should understand the role of each of these professionals to develop effective collaborative interdisciplinary relationships and make effective use of the limited resources available in schools (Flaherty et al., 1998; Rappaport et al., 2003).

The social milieu of a school is a key factor influencing the desirability, acceptability, and effectiveness of mental health activities proposed by the psychiatric consultant. The social milieu derives from several interrelated components, including the sociodemographic composition of the student body and school personnel (social inputs); the size, structure, and processes of the school (social structure); and cultural characteristics such as norms, expectations, and feelings about the school shared by students and staff (social climate; Brookover et al., 1979). Research suggests that the social climate of a school has a substantial impact on students' academic achievement that can surpass expectations based on social inputs or structure (Brookover et al., 1979). For example, schools with high expectations for student achievement and school-wide recognition

for academic success can be more effective than schools without this climate, especially in large schools with predominantly disadvantaged student populations. The social climate of a school may affect mental health as well (Rutter et al., 1979). Thus, high-conflict schools have been shown to produce an increase in the severity of externalizing symptoms in students (Kasen et al., 1990).

Because of increasing cultural diversity in student populations in the United States, it has become essential for school personnel to learn new skills for understanding, motivating, teaching, and empowering each individual student regardless of race, ethnicity, sex, religion, or creed. Consulting psychiatrists can partner with school support staff to act as catalysts to ensure that teachers, students, and parents learn how to value diversity. Valuing diversity includes awareness of self and others; sensitivity toward and willingness to learn about others; and knowledge about the history, values, and current problems of the predominant cultural groups represented in the school (Locke, 1992).

Understanding the sociocultural milieu of a school is essential for developing a sense of what it is like to attend the school as a student, work in it as a professional staff member, and interact with it as a parent. One of the most effective ways for a consultant to learn about the milieu of a school is to walk its hallways and playground, eat in the lunchroom, observe classrooms, and attend extracurricular and parent association activities. Interviews with representatives of key constituent groups (school administration and faculty, parents, students, and community leaders) also can provide important information about the milieu. The consulting psychiatrist should seek consultation from cultural competency experts if the psychiatrist is unfamiliar with the sociocultural needs and preferences of the predominant racial/ethnic/religious groups in the school.

Consulting psychiatrists must be sensitive to the competing priorities faced by school board members and administrators, who face vigorous pressure from diverse constituents to improve the academic competencies of students. Moreover, few state or federal mandates exist to support the implementation of comprehensive mental health services in schools, and conventional categorical streams of funding inhibit coordination of intervention efforts. Recommendations made by the consultant must be made in the context of these constraints.

**Recommendation 3. Psychiatrists Should be Knowledgeable About Legislation that Establishes and Protects the Educational Rights of Students with Mental Disabilities [MS]**

The foundation for all legislation pertaining to the educational rights of children with disabilities, including mental disabilities, rests in the Fourteenth Amendment to the U.S. Constitution, which prohibits discrimination through its equal protection clause. Despite this federal protection, through the first half of the 20th century many states either completely excluded children with disabilities from public school systems and placed them in institutions or relegated them to segregated classes in schools where they received little attention. The U.S. Supreme Court decision in *Brown v Board of Education* (1954) rectified this inequity, asserting that education is a “right that must be made available to all on equal terms.” Throughout the next four decades, the U.S. Congress took steps to end discrimination against children with disabilities in schools, guided by the principle that all such children must receive a free and appropriate public education in the least restrictive environment.

One of the most important of the early legislative acts is Section 504 of the Rehabilitation Act (1973), which mandates inclusion without discrimination for any person who has a physical or mental impairment that substantially limits a major life activity. This legislation was followed closely by the landmark Education for All Handicapped Children Act (EAHCA, Public Law 94-142, 1975), which mandates the provision of special education and related services to meet the unique needs of children with physical or mental disabilities. Although Section 504 had established the principle of educational inclusion on civil rights grounds, for the first time the EAHCA provided federal funds to support the efforts of states to develop individualized special education programs.

A number of amendments have been made to the EAHCA since its passage. In 1986 Congress enacted Public Law 99-457, the Education of the Handicapped Amendments, and in 1990 enacted the Individuals with Disabilities Education Act (IDEA, Public Law 101-476, 1990). Whereas the previous legislation had applied only to children between 6 and 21 years old, the amendments extended the protections to children younger than age 6. Subsequently, IDEA expanded the list of

disabilities protected under the law, specifically defined special education and related services, and increased early intervention services for young children. The most recent amendments (1997) provide for increased related services, delineate specific guidelines for school-based discipline of children with disabilities, and expand parental rights in the special education process. (Additional information on these topics is available at <http://www.ed.gov/index.jsp>.)

There can be considerable local variation in the interpretation of the federal educational rights legislation. For example, states and localities may vary in their criteria for eligibility, procedural safeguards, and availability of services. Psychiatrists consulting to schools must be knowledgeable about the laws and regulations for the state and locality in which they practice. Administrative codes interpreting the federal legislation and specifying procedures can be obtained from the education agency of each state and locality.

**Recommendation 4. Psychiatrists Should be Able to Advise School Personnel and Parents about Appropriate Accommodations, Special Education and Related Services, and Placements for Students with Psychiatric Disorders [MS]**

According to the provisions of IDEA, a child is eligible for special education services if he or she meets criteria for one or more categories of disability, as shown in Table 1, and the disability substantially interferes with his or her educational progress. States have a responsibility to actively “find” children with suspected disabilities, who can be identified through the observation of their parents, teachers, or other professionals (e.g., the consulting psychiatrist), or through school-based global screening (e.g., vision/hearing tests, group achievement tests). A number of psychiatric disorders correspond to IDEA disability designations, including pervasive developmental (autism), mood, anxiety, and psychotic (emotional disturbance), learning (learning disability), communication (speech/language impairment), attention-deficit/hyperactivity (other health impairment), and behavior disorders (emotional disturbance, although in recent years there has been considerable tightening of eligibility requirements around this category, and children with noncomorbid behavior disorders may experience barriers to service provision). Mental retardation also qualifies as a disability.

**TABLE 1**  
Categories of Disability Under IDEA

Autism	Orthopedic impairment
Deafness	Other health impairment <sup>b</sup>
Deaf-blindness	Specific learning disability
Emotional disturbance <sup>a</sup>	Speech-language impairment
Hearing impairment	Traumatic brain injury
Mental retardation	Visual impairment
Multiple disabilities	

<sup>a</sup> One or more of the following characteristics that is exhibited to marked degree over an extended period of time that adversely affects a child's educational performance: (1) an inability to learn that cannot be explained by intellectual, sensory, or health factors; (2) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (3) inappropriate types of behavior or emotions under normal circumstances; (4) a pervasive mood of unhappiness or depression; or (5) a tendency to develop physical symptoms or fears associated with personal or school problems. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance.

<sup>b</sup> An acute or chronic health problem that results in limited alertness with respect to the educational environment and adversely affects a child's educational performance.

A child with a suspected disability should undergo a special education evaluation to determine his or her eligibility for special education services. A special education evaluation is a comprehensive individual analysis of all suspected areas of disability conducted by a multidisciplinary team of school-based professionals. Typical components of a special education evaluation are listed in Table 2. The consulting psychiatrist's

**TABLE 2**  
Components of a Special Education Evaluation

Usual components
Cognitive abilities
Communication abilities
Academic performance
Social/emotional status
Medical history and current health status
Vision/hearing screenings
Motor abilities
Additional components (specialized evaluations) as indicated
Intelligence testing
Speech-language testing
Achievement testing
Neuropsychological testing
Physical examination
Occupational/physical therapy evaluation
Psychiatric assessment

assessment can be included in the evaluation as a specialized evaluation. The request for a special education evaluation should be made in writing and may specify the reasons for the request (e.g., child is performing below grade level academically or is having attention, behavioral, social, emotional, developmental, or communication problems). Although requests from parents or professionals outside the school do not guarantee an evaluation, the "child find" requirement makes it difficult for a school to refuse such a request. If the school does refuse, then parents have the right to appeal the decision (Table 3). If the school conducts a special education evaluation, then it must be completed within a specified "reasonable" time period (usually within 60 working days). When the evaluation has been completed, the school-based team will schedule an eligibility meeting to present the findings to the parents. If there is disagreement about the findings from the evaluation, then the parents may obtain an independent evaluation to present as evidence during any of the various appeal options that are available for conflict resolution (Table 3).

If the findings from the special education evaluation indicate that the child has a disability and would benefit from special education and related services, the school-based team will develop a written Individualized Education Program (IEP) for the child in collaboration with his or her parents. Typical components of an IEP are presented in Table 4. In addition to special education services, salient related services for students with psychiatric disorders include a behavioral intervention plan, medical/school health services (for administration of medication), counseling/social work/psychological services, speech-language services, recreation services, and parent counseling/training services. The IEP will specify in what setting the special education and related services will be provided. According to the provisions of IDEA, the setting must be both appropriate to the child's needs and least restrictive of his or her interactions with peers without disabilities. Typical settings are listed in Table 5 in order of increasing restrictiveness. Schools generally will attempt to provide special education services on-site or within their district. If appropriate services are unavailable, however, then the school must arrange for an alternative placement out of district. If the parents disagree with the educational program proposed in the IEP, then they can appeal (Table 3). The child remains in the current placement until the disagreement is resolved.

**TABLE 3**  
Conflict Resolution Options

- Discuss the issue informally with the school staff, principal, superintendent, and/or director of special education.
- File a written complaint with the state Board of Education. A full investigation must follow. If the parent disagrees with the findings of the investigation, then he or she can request a review by the U.S. Department of Education.
- Request impartial mediation with a trained mediator appointed at no cost by the state Board of Education.
- Request a due process hearing with a hearing officer appointed by the state Board of Education. The parent has the right to legal counsel.
- Appeal to a court of law. The court may award attorneys' fees should the parent prevail in the decision.

The IEP is reviewed and revised annually; however, if the parents believe that the child is not progressing adequately, they may request an IEP review at any time to consider changes in services. Every 3 years, a comprehensive reevaluation is conducted by the school-based team to determine whether the child continues to meet eligibility criteria for special education services, and what services should be provided.

Children with an IEP are afforded special disciplinary considerations. Children with a disability who engage in disruptive behavior should have a Behavioral Intervention Plan (BIP) written into their IEP, with the goal of preventing suspensions or expulsions. A BIP derives from the findings of a functional behavioral assessment, which identifies the disruptive behaviors with their precipitants, functions, and settings. The BIP specifies behavioral goals based on functional alternatives to disruptive behaviors, and behavioral interventions designed to help the student achieve the behavioral goals (Table 6 provides a sample BIP for disruptive behavior). If the number of consecutive days of suspension exceeds 10 in a given school year or if more than 10 nonconsecutive days of suspension constitute a pattern, then a Manifestation Determination Review (MDR) must be conducted by the school to determine whether the behavior resulting in the suspensions was related to the child's disability. If the behavior was related to the child's disability, then the child may not be excluded for more than 10 days and the IEP and BIP must be revised to address the behavior problem. If the behavior was not related to the child's disability, the child may be excluded for more than 10 days, provided that he or she receives a free and appropriate public education during the removal period.

**TABLE 4**  
Components of an IEP

Usual components
Present level of educational performance
Educational goals and objectives with measurable benchmarks
Educational modifications and accommodations
Special education and related services
Placement and participation specifications
Transition services planning
Transfer of rights planning
Additional components/related services as indicated
Adapted physical education
Audiology
Assistive technology
Behavioral Intervention Plan
Counseling services
Extended school year services
Home-based support
Medical services
Occupational therapy
Orientation/mobility services
Parent counseling/training
Physical therapy
Psychological services
Recreation
Rehabilitation counseling services
School health services
School social work services
Speech-language services
Transportation services

**TABLE 5**  
Education Placement Options

Regular classroom
Regular classroom with consultative services to teacher
Regular classroom with modifications/accommodations/supports
Regular classroom with pull-out resource services
Special education classroom with some pull-out regular education
Special education classroom
Special school
Home/hospital services

**TABLE 6**

Sample Behavioral Intervention Plan for Disruptive Behaviors

Behavioral Goals	Behavioral Interventions
Student will communicate appropriately with teachers and classmates	Have the student practice appropriate verbal exchanges (e.g., "excuse me; I'm sorry")
Student will demonstrate self-control in stimulating situations	Remove the student from the situation until control is achieved
Student will improve frustration tolerance	Remove potentially frustrating stimuli (teasing, coveted possessions, competition)
	Teach ways to deal with frustration (remove self from situation, verbalize feelings)
Student will demonstrate appropriate behavior when angry	Teach the student to think before acting (what should I do?)
Student will accept responsibility for mistakes	Calmly confront the student with the facts (forgot homework) and refuse to accept excuses
Student will appreciate consequences of his behavior	Teach perspective taking (how would it feel if someone did that to you?)

The IEP must be revised to document this change in services. If the parents disagree with the decision of the MDR, then they may appeal the decision.

A student with a disability may be expelled and transferred to a temporary alternative placement under several conditions: (1) if the student carries a weapon to school or a school function or possesses, uses, or sells illegal drugs or controlled substances at school or a school function; (2) if the hearing officer determines that maintaining the current placement is substantially likely to result in injury to the child or others; and (3) for violations of school policies other than the above if students without disabilities are subject to the same disciplinary measures.

Section 504 protections extend further than those of IDEA because Section 504 does not require a specific disability designation (Table 1) or a need for special education services as eligibility requirements. Instead,

Section 504 applies to any person who has a physical or mental impairment that substantially limits a major life activity. Accordingly, many psychiatric disorders may qualify for protection. Section 504 provides for an evaluation followed by an accommodation plan that specifies reasonable program modifications and classroom accommodations that enable the student with an impairment to obtain greater benefit from his or her education program (Tables 7 and 8 provide examples of modifications/accommodations for students with attention-deficit/hyperactivity disorder [ADHD] and language disorders, respectively). Section 504 also may provide for the development and implementation of a BIP (Table 6) for students with disruptive behaviors. These and other accommodations for other psychiatric disorders can be recommended by the consulting psychiatrist.

**TABLE 7**

Examples of Program Modifications and Classroom Accommodations for Students With ADHD

Program Modifications	Classroom Accommodations
Extend time for assignments	Establish work-play-work routine
Reduce volume of assignments	Provide preferential seating
Break long assignments into smaller chunks	Minimize distractions
Extend time for test taking	Establish time-to-completion goals; keep chart showing progress
Provide tests in short segments	Provide verbal and visual cues to stay on-task
Highlight main ideas in text	Assign a study/monitoring partner
Provide study outlines/guides	Use small-group instruction
Provide practice tests	Simplify and repeat directions; give concrete examples
Provide immediate correction	Have student repeat directions and ask clarifying questions
Use assignment notebook	Vary routine tasks to increase novelty
Remind student of materials needed for homework	Organize student's work space
Remind student to turn in homework	Allow for active modes of responding
Reinforce double-checking	Plan for transitions by posting schedules

**TABLE 8**

Examples of Accommodations for Students With Language Disorders

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Obtain student's full attention before giving verbal instruction
Speak in short, simple, and positively phrased sentences
Pause between sentences
Allow sufficient time for the student to formulate a response while maintaining eye contact
Restate response
Provide "cloze" phrases (e.g., "You have a fork, but for ice cream, you need a _____.")
Offer choices verbally and visually (e.g., "Would you like the pen or the pencil?")
Respond promptly to requests that are stated verbally
Model verbal requests for incomplete communication attempts
Explicitly model and encourage use of pragmatic language skills (greetings, turn- and leave-taking, etc.)
Positively reinforce appropriate use of eye contact during verbal exchanges
Maintain consistent expectations for communication behaviors and reinforce frequently with verbal praise

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Information for parents regarding the special education process can be found at <http://www.ed.gov/parents/needs/speced/iepguide>.

**Recommendation 5. Psychiatrists Should be Able to Conduct a Comprehensive Assessment of a Student with an Emphasis on Understanding Barriers to Learning, and Participate in Comprehensive Treatment Planning with Clinical, School, Home, and Community Components as Indicated [MS]**

The first step of an assessment of a student in which the intent is to provide information to the school is to obtain written consent from appropriate parties, as mandated by federal and state law. The consent form should be standardized and reviewed by legal advisors to the school and consultant and should explicitly state the purpose of the consultation, how the information obtained during the consultation will be used, and what information (if any) will be kept confidential. It should be made clear to the guardians that the information derived from the assessment could result in educational programming or placement changes for their child.

The second step ideally involves meeting with school personnel to clarify the nature, extent, and circumstances of the student's problems and the specific consultation question. If a face-to-face meeting is not feasible, then the consultation question can be communicated to the consultant in writing, preferably on a special form created for that purpose. The initial communication should include a request for relevant information for the consultant to review, including the academic, disciplinary, attendance, anecdotal, and health records of the student; special education service plans (i.e., IEPs, 504

plans); vision/hearing test results; previous psychological, educational, neuropsychological, and/or speech-language evaluations; and standardized teacher- and parent-completed rating scales. These documents must be perused carefully because they can provide critical information about previously identified barriers to learning (e.g., learning and language problems [see AACAP, 1998]).

The third step involves the assessment of the student, which for the most part can follow the format described in the Practice Parameters for the Psychiatric Assessment of Children and Adolescents (AACAP, 1997). Additional information may facilitate the identification of important barriers to learning. Such information includes the child's cognitive, emotional, social, and physical strengths; parental relationships and communication with school personnel; parental attitudes toward and responses to school disciplinary actions; reasons for habitual absences; parental expectations for their child's school performance; and details about situations that could influence their child's school performance, such as physical or medical status, health practices (e.g., sleep, nutritional, and exercise patterns), after-school care and scheduling, usual summer activities, and peer relationships.

The fourth step could involve observation of the student in several school settings (e.g., classroom, hallway, playground), if the psychiatrist is invited to do so by the school. For older students, the consultant should attempt to observe at least two different academic classes as well as one or more nonacademic settings, such as the lunchroom or gym. Observation will enable the consulting psychiatrist to assess the student's cognitive, linguistic, emotional, behavioral, social, and motor functions in an educational environment.

The fifth step involves the preparation of a written report (for a sample, see Mattison, 1993) that can be presented to school personnel and the parents. The substance of the report should be a concise explication of the barriers to learning experienced by the student, including psychiatric diagnoses, culminating in precise and helpful educational and therapeutic recommendations. It should be written in a clear, concise style that is easy to understand. The consultant should be aware that this report may be the most comprehensive assessment in the student's entire school record and as such may have the greatest impact of any assessment on the student's educational placement and programming. The consultant also should be aware of who may have access to this report and should avoid including detailed personal information that is not relevant to the purposes of the assessment.

The sixth step ideally involves face-to-face presentation of the report to the student support team, the student, and the student's parents. The focus of this meeting should be achieving consensus regarding the identified barriers to learning and regarding appropriate, feasible, and acceptable educational and therapeutic interventions. The school will decide whether to implement the recommended school-based interventions informally or within the context of 504 or IDEA programming. A member of the student support team (often the social worker) should be designated to coordinate the various school-based interventions. At this point, the consultant may be called on by the coordinator to provide additional assistance (e.g., identify appropriate home-, clinic-, or community-based services; consult with a physician regarding a medication trial or a specialized referral; consult with a therapist regarding salient treatment issues; consult with a psychologist or speech-language pathologist regarding additional testing). It should be made clear that decisions regarding therapeutic interventions should be made by the parents, child, and treating clinician.

The final step of the case consultation involves periodic follow-up of the recommendations of the report. Periodic meetings should be scheduled with the student support team to review each of the previous case consultations and the progress to date of the recommended interventions. Modifications may need to be made as the student's performance progresses or declines, as available resources are enhanced or diminished, or as the feasibility and/or acceptability of

the interventions to the school personnel or family change.

**Recommendation 6. Psychiatrists Could Collaborate with School Personnel to Conduct a Needs Assessment to Guide the Development of School-Based Mental Health Interventions [OP]**

The purpose of a needs assessment is to determine the primary mental health needs within a school and feasible, acceptable ways to meet those needs (Grunbaum et al., 1995). Information about needs can be gathered from all key constituent groups, including school personnel, school board members, special education administrators, students, parents, and community leaders and can be acquired informally through group discussions and individual interviews or formally through a survey. Specific pertinent information to be derived from a needs assessment may include prevailing knowledge and attitudes pertaining to mental health issues, degree of confidence in the ability of school personnel to manage mental health situations (e.g., identifying a student who may be depressed, implementing a behavior management plan, managing a crisis), prevailing beliefs about the major mental health problems facing the school and the greatest barriers to overcoming those problems, and the available mental health resources.

**Recommendation 7. Psychiatrists Could Collaborate with School Personnel to Deliver Effective School-Based Universal Prevention Programs [OP]**

The goal of a universal prevention program is to provide pertinent information about mental health to the entire school community, including school personnel, parents, and students. Because of the primacy of classroom management among the factors influencing student comportment and learning (Wang et al., 1997), school personnel may consult the psychiatrist about effective classroom management techniques. A number of these strategies have been catalogued by Rathvon (1999) and include establishing clear classroom rules and procedures, managing transitions without undue interruption, improving time spent on-task, communicating competently, and improving achievement and behavior with contingent rewards (Table 9). School personnel also may ask the psychiatrist to plan a series of presentations for school staff that convey information about mental health needs across developmental stages, the association between academic achievement and

**TABLE 9**

Examples of Classroom Management Strategies

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- Select seating arrangements that maximize on-task behavior
  - Establish, model, and rehearse classroom rules (e.g., follow directions the first time; keep hands, feet, objects to self; speak properly; maintain respect; complete work)
  - Routinize classroom procedures
  - Minimize time in transitions
  - Monitor productivity during seatwork
  - Provide immediate social reinforcement (e.g., praise, “high fives”, thumbs up) for following rules and procedures
  - Create token or point system for following rules and procedures; establish list of tangible reinforcers (e.g., become line captain, be in charge of taking attendance, create the bulletin board display) to exchange for tokens or points
  - Apply limited use of consequences (e.g., “time outs” or “chill outs,” loss of points, tokens, or privileges) for dangerous or destructive behavior
- 

mental health, the most common child and adolescent psychiatric disorders, “warning signs” that may help to identify youths in need of services, effective treatment strategies, and easily accessible linkages to service providers.

Parents may be interested in many of these same topics, which could be addressed by the consulting psychiatrist at parent association meetings. The psychiatrist also could plan a series of presentations about effective parenting techniques, using contingency management strategies that parallel those used by the teacher in the classroom. In addition, parents could be provided with information about enhancing collaboration between home and school, including communicating effectively with teachers, volunteering at school, reinforcing school-related rules at home, and addressing school-related concerns with their children.

A number of universal prevention programs for students have focused on improving social competence, whereas others have targeted high-risk behaviors, such as substance use, aggressive conflict resolution, and unprotected sex (Walter, 2001). Most universal prevention programs are delivered in classrooms by trained teachers or guest facilitators (often from local public health or mental health agencies). Programs with empirical evidence of effectiveness have been comprehensively reviewed by Eisen et al. (2000) and Rones and Hoagwood (2000). In general, effective social competence programs provide skills training in behavioral and emotional self-regulation, interpersonal problem solving, reflective thinking, and social interaction (Payton

et al., 2000). Effective substance abuse prevention programs provide information about the risks associated with substance use, teach students how to refuse offers to experiment with substances, and correct misperceptions about the prevalence and acceptability of substance use (Dusenbury and Falco, 1995). Effective conflict resolution programs teach students how to manage anger, control aggressive responses, understand how conflict is generated, and avoid or diffuse potentially violent confrontations (Dusenbury et al., 1997). Effective sexuality programs teach students how to avoid situations in which they are vulnerable to having unintended intercourse, how to refuse offers to engage in intercourse if they do not feel ready, how to refuse intercourse if barrier protection is unavailable, and how to use barrier protection correctly (Kalichman et al., 1996; Kirby, 1997).

In contrast to the programs described above, supportive evidence of the effectiveness of universal programs for the prevention of depression (Clarke et al., 1993) and suicide (Shaffer et al., 1991) and for stress reduction (Henderson et al., 1992) is sparse. Additional research is needed before the implementation of the latter types of programs can be recommended with confidence.

**Recommendation 8. Psychiatrists Could Collaborate with School Personnel to Deliver Effective School-Based Selective Prevention Programs [OP]**

Selective prevention programs are targeted at students who are at higher risk for developing emotional,

behavioral, or social problems than are the general population of students. The implementation of selective prevention programs is predicated on the ability of school personnel to identify vulnerable students, who can then be screened for underlying psychopathology and provided with appropriate services. Teachers, social workers, guidance counselors, and nurses can play a key role in this gatekeeping process if they have been educated by the consulting psychiatrist to recognize the characteristics of students at high risk.

High-risk students fall into several categories: students who are performing poorly in school because of excessive absenteeism, frequent referrals for disciplinary actions, or academic failure; students who are engaging in multiple problem behaviors, including drug use, violence, and unprotected sex; and students who are exposed to psychosocial adversity, including parental psychopathology, marital conflict/dissolution, family dysfunction, and community disintegration.

Undetected psychiatric disorders often underlie the overt presentation in high-risk students (see Mattison, 2000, for a review of pertinent studies). Thus, students who are habitually absent often have anxiety, mood, or conduct disorders. Students who are repeatedly referred for disciplinary actions often have high rates of externalizing psychopathology and learning or language disorders. Students who are failing academically often have diminished cognitive abilities, learning or language disorders, or behavioral problems. Students who are involved in problem behaviors or are exposed to adverse psychosocial circumstances often have undetected mood, anxiety, disruptive behavior, or adjustment disorders.

Psychiatric consultants can inform school personnel about these interrelationships so that referrals for psychiatric assessment can be made more effectively. Some schools may be receptive to the idea of a systematic procedure for identifying high-risk students (Mattison, 2000). For example, high-risk students may be defined as those who are in the upper decile of the schoolwide distribution for absenteeism or disciplinary referrals; score in the bottom decile of the school's standardized test scores; are known to be engaging in a problematic behavior; or are known to be encountering difficult psychosocial circumstances. These identified students then can be screened by trained school personnel for the need for additional assessment.

High-risk students who are found on assessment to be free from major psychopathology may respond well

to group interventions led by the school social worker, guidance counselor, nurse, or other trained school staff in collaboration with the consulting psychiatrist. For example, students struggling with academic, environmental, or social problems may benefit from participation in counseling or advisory groups targeted at enhancing learning, organization and planning, coping, or social skills. Older students may benefit from participation in groups targeted at specific problem behaviors (e.g., substance use, conflict resolution) or transition to adulthood (e.g., sexuality, relationships, parenting, advanced education, vocation). The advantages and disadvantages of group counseling in school settings have been delineated by Berkovitz (1987).

**Recommendation 9. Psychiatrists Could Advise School Personnel About the Appropriate Use of Rating Scales to Identify Symptomatic Students Who May be in Need of Psychiatric Assessment [OP]**

Psychiatrists consulting to schools can advise school personnel regarding the use of appropriate rating scales to screen for symptomatic students. Myers and Winters (2002a) have reviewed the key issues pertaining to the selection of rating scales for various purposes and conclude that the most appropriate scales are valid, stable, and sensitive; measure the problem in a direct and non-reactive manner; have utility; and are suitable for the intended purpose. Specific instruments that meet at least some of these criteria and can be used in school settings have been extensively critiqued (Collett et al., 2003a,b; Myers and Winters, 2002b; Ohan et al., 2002; Winters et al., 2002). Rating scales can be administered universally, for example, to entire populations of older students to screen for depression (e.g., Clarke et al., 1995), anxiety (e.g., Chemtob et al., 2002; March et al., 1998), or involvement in high-risk behaviors (e.g., Vaughan et al., 1996); or to teachers of entire populations of younger students to screen for attention or disruptive behavior problems (e.g., Casat et al., 1999). Universal administrations of rating scales generate a substantial service burden, however, because resources must be expended to follow up with students who screen "positively." Alternatively, rating scales can be used selectively with high-risk students who have been identified by school personnel. This approach generates a smaller service burden, but students whose problems are covert may be missed. In any case, several protocols should be in place before the implementation of

a screening program: a protocol to train gatekeepers (e.g., school social workers or nurses) to understand and appropriately use the rating scales; a protocol to obtain parental consent and to notify parents of screening results; a protocol to protect the confidentiality of students' responses to self-report rating scales; a protocol to initiate appropriate school-based services if indicated; and a protocol to provide appropriate, timely, and convenient linkages to external service providers for students in need of additional assessment.

**Recommendation 10. Psychiatrists Could Collaborate with School Personnel to Deliver Effective School-Based Indicated Prevention Programs [OP]**

Indicated prevention programs are targeted at students who exhibit symptoms of emotional, behavioral, or social problems but do not meet the full diagnostic criteria for a specific disorder. Most of the existing programs of this type have targeted students with symptoms of aggression, depression, anxiety, or trauma and were designed for delivery in group settings by trained school personnel (e.g., psychologists, counselors) in collaboration with clinicians. Only a small number of indicated prevention programs have been rigorously evaluated for evidence of effectiveness in school settings.

The largest body of evidence pertains to school-based violence prevention programs for aggressive students. A systematic review and meta-analysis of randomized, controlled trials of these programs (Mytton et al., 2002) suggested that they appear to produce meaningful reductions in aggressive and violent behaviors, especially when delivered to mixed-gender groups.

The evidence of the effectiveness of school-based programs targeted at mood, anxiety, and trauma symptoms is more limited. Among the effective programs targeted at symptoms of depression are the Coping With Stress Course for high school students (Clarke et al., 1995) and the Depression Prevention Program for elementary school students (Gillham et al., 1995). Both programs focus on helping students develop cognitive skills to identify and challenge negative or irrational thoughts related to depressed mood. At follow-up, the Coping With Stress Course was found to significantly reduce the occurrence of major depression or dysthymia, and the Depression Prevention Program was found to significantly reduce depressive symptoms among students receiving the program as compared with those in the control groups.

An effective program targeted at elementary school students with symptoms of anxiety as well as students meeting the full diagnostic criteria for anxiety disorders is the Coping Koala Program (Dadds et al., 1997, 1999). The program focuses on relaxation exercises, cognitive restructuring, exposure, and contingent rewards. At both 6-month and 2-year follow-up, reductions were observed in the proportion of intervention subjects meeting diagnostic criteria for anxiety disorders as compared with control subjects.

The effects of indicated programs targeted at elementary school students exposed to trauma were examined by Chemtob et al. (2002), Kataoka et al. (2003), and Stein et al. (2003). The programs focus on educating students about common reactions to trauma, restoring a sense of safety, grieving losses, managing anxiety, adaptively expressing anger, challenging negative thoughts, and achieving closure. After treatment, students in these studies reported significant reductions in trauma-related symptom severity.

An innovative indicated program targeted at elementary school students with concurrent internalizing and externalizing symptoms was evaluated by Weiss et al. (2003). The year-long program comprised individual, small group, and classroom sessions with students, plus sessions with parents and teachers. The student sessions focused on developing social, communication, affect recognition/expression, self-monitoring, relaxation, and cognitive reattribution skills. The parent and teacher sessions focused on using appropriate praise and punishment, improving adult-child communication, strengthening the adult-child relationship, and supporting the students in skills development. At follow-up, intervention subjects exhibited greater improvement in both internalizing and externalizing symptoms than did control subjects.

**Recommendation 11. Psychiatrists Could Collaborate with School Personnel to Deliver Effective School-Based Treatment Programs [OP]**

Treatment programs are targeted at students who are found on clinical assessment to meet diagnostic criteria for specific psychiatric disorders. The literature regarding effective school-based treatment programs is limited, focusing primarily on the treatment of ADHD.

The effects of school-based nonpharmacological interventions for the treatment of ADHD were examined by DuPaul and Eckert (1997) in a meta-analysis of

63 outcome studies. They concluded that contingency management and tutoring were more effective than cognitive-behavioral strategies in reducing ADHD behaviors and enhancing academic performance.

In addition to the results from the Coping Koala Program noted above, findings from three additional pilot studies (Ginsburg and Drake, 2002; March et al., 1998; Masia et al., 2001) also suggest the effectiveness of school-based programs for the treatment of anxiety disorders. These programs were designed for delivery in group settings by trained school personnel (e.g., psychologists, counselors) in collaboration with clinicians. All three programs focused on relaxation exercises, cognitive restructuring, and gradual exposure, and all were associated at follow-up with reductions in the proportions of subjects meeting diagnostic criteria for their primary anxiety disorder.

Manual-based group programs for the cognitive-behavioral treatment of depression in adolescents also have been developed (Reinecke et al., 1998) and could be adapted for implementation in school settings.

**Recommendation 12. Psychiatrists Could Collaborate with School Personnel to Develop and Implement a School Crisis Plan [OP]**

According to Arroyo (2001), a crisis at school occurs when the integrity of the school environment is threatened by an event to such a degree that the school's internal resources are deemed insufficient or exhausted. Events that may precipitate a crisis include the suicide of a student or school staff member, a natural disaster, and violence that directly affects the school community.

Many schools have developed crisis response and mental health recovery plans to facilitate the school's effective management of a crisis situation. Psychiatrists consulting to schools can play an important role in the development and implementation of these plans. The primary goals for the consultant will be to help the school (1) resume a normal routine as quickly as possible and (2) plan to address the needs of students and staff beyond the immediate crisis period. Successful consultations build on preexisting relationships with school personnel and involve collaborations with organizations beyond the school, such as departments of health and mental health, law enforcement agencies, and other organizations skilled in crisis response.

Crisis response and mental health recovery plans should be highly organized and centralized in the school

or district administrative office. The roles, responsibilities, and required training of both school staff and other collaborators should be specified in the plan, and it should contain a framework for the coordination of and communication with all of the collaborative entities. It also should contain guidelines for interacting with the media.

Immediately after a crisis, interventions should focus on providing social and emotional support to students and school personnel and information about normal responses to traumatic events to school personnel, parents, and other caretaking adults. Teachers can be provided with guidelines about developmentally appropriate ways to discuss the events with students and how to model appropriate coping strategies. After the immediate crisis period, school personnel should be taught to recognize the signs and symptoms of trauma-related disorders in students, and arrangements should be made for the appropriate treatment or referral of students or staff.

**SCIENTIFIC DATA AND CLINICAL CONSENSUS**

Practice parameters are strategies for patient management, developed to assist clinicians in psychiatric decision making. AACAP practice parameters, based on evaluation of the scientific literature and relevant clinical consensus, describe generally accepted approaches to assess and treat specific disorders or to perform specific medical procedures. These parameters are not intended to define the standard of care, nor should they be deemed inclusive of all proper methods of care or exclusive of other methods of care directed at obtaining the desired results. The clinician, after considering all of the circumstances presented by the patient and his or her family, the diagnostic and treatment options available, and available resources, must make the ultimate judgment regarding the care of a particular patient.

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**REFERENCES**

*References marked with an asterisk are particularly recommended.*

- \*Adelman HS, Taylor L (2000), Promoting mental health in schools in the midst of school reform. *J Sch Health* 70:171-178
- Adelsheim S (2000), Addressing barriers to development and learning: school, family, community, and agency partnerships in New Mexico. *Counsel Hum Dev* 32:1-12

- Allensworth D, Lawson E, Nicholson L, Wyche J (1997), *Schools and Health: Our Nation's Investment*. Washington, DC: National Academy Press
- American Academy of Child and Adolescent Psychiatry (1997), Practice parameters for the psychiatric assessment of children and adolescents. *J Am Acad Child Adolesc Psychiatry* 36:4S–20S
- American Academy of Child and Adolescent Psychiatry (1998), Practice parameters for the assessment and treatment of children and adolescents with language and learning disorders. *J Am Acad Child Adolesc Psychiatry* 37:46S–62S
- \*American Psychiatric Association (1993), *Psychiatric Consultation in Schools*. Washington, DC: American Psychiatric Press
- Arroyo W (2001), School crisis consultation. *Child Adolesc Psychiatr Clin N Am* 10:55–66
- Berkovitz IH (1987), Value of group counseling in secondary schools. In: *Adolescent Psychiatry, Developmental and Clinical Studies*, Feinstein SC, ed. Chicago: University of Chicago Press, pp 522–545
- \*Berkovitz IH (1998), School consultation. In: *Handbook of Child and Adolescent Psychiatry, Volume 7*, Noshpitz JD, Adams PL, Bleiberg E, eds. New York: Wiley
- \*Berkovitz IH, ed. (2001), *Psychiatric Clinics of North America, School Consultation/Intervention*. Philadelphia: Saunders
- Berlin IN (1975), Psychiatry and the school. In: *Comprehensive Textbook of Psychiatry II*, Freedman AM, Kaplan HI, Sadow BJ, eds. Baltimore: Williams & Wilkins, pp 2253–2255
- Bostic JQ, Rauch PK (1999), The 3 R's of school consultation. *J Am Acad Child Adolesc Psychiatry* 38:339–341
- Brookover WB, Beady C, Flood P, Schweitzer J, Wisenbaker J (1979), *School Social Systems and Student Achievement: Schools Can Make a Difference*. New York: Praeger
- Brown v Board of Education* (1955), 349 US 294, 509n.186.505n.186
- Burns BJ, Costello EJ, Angold A et al. (1995), Children's mental health service use across service sectors. *Health Aff (Millwood)* 14:147–159
- Caplan G (1970), *The Theory and Practice of Mental Health Consultation*. New York: Basic Books
- Casat CD, Norton HJ, Boyle-Whitesel M (1999), Identification of elementary school children at risk for disruptive behavioral disturbance: validation of a combined screening method. *J Am Acad Child Adolesc Psychiatry* 38:1246–1253
- Chemtob CM, Nakashima JP, Hamada RS (2002), Psychosocial intervention for postdisaster trauma symptoms in elementary school children, a controlled community field study. *Arch Pediatr Adolesc Med* 156:211–216
- Clarke GN, Hawkins W, Murphy M, Sheeber L (1993), School-based primary prevention of depressive symptomatology in adolescents: findings from two studies. *J Adolesc Res* 8:183–204
- Clarke GN, Hawkins W, Murphy M, Sheeber LB, Lewinsohn PM, Seeley JR (1995), Targeted prevention of unipolar depressive disorder in an at-risk sample of high school adolescents: a randomized trial of a group cognitive intervention. *J Am Acad Child Adolesc Psychiatry* 34:312–321
- Collett BR, Ohan JL, Myers KM (2003a), Ten-year review of rating scales. V: scales assessing attention-deficit/hyperactivity disorder. *J Am Acad Child Adolesc Psychiatry* 42:1015–1037
- Collett BR, Ohan JL, Myers KM (2003b), Ten-year review of rating scales. VI: scales assessing externalizing behaviors. *J Am Acad Child Adolesc Psychiatry* 42:1143–1170
- \*Comer JP (1992), School consultation. In: *Psychiatry* (Vol. 2), Michels R, Cooper AM, Guze SB, eds. Philadelphia: Lippincott, pp 1–10
- Dadds MR, Spence SH, Holland DE, Barrett PM, Laurens KR (1997), Prevention and early intervention for anxiety disorders: a controlled trial. *J Consult Clin Psychol* 65:627–635
- Dadds MR, Spence SH, Holland DE, Laurens KR, Mullins M, Barrett PM (1999), Early intervention and prevention of anxiety disorders in children: results at 2-year follow-up. *J Consult Clin Psychol* 67:145–150
- DuPaul GJ, Eckert TL (1997), The effects of school-based interventions for attention-deficit hyperactivity disorder: a meta-analysis. *Sch Psychol Rev* 26:5–27
- Dusenbury L, Falco M (1995), Eleven components of effective drug abuse prevention curricula. *J Sch Health* 65:420–425
- Dusenbury L, Falco M, Lake A, Brannigan R, Bosworth K (1997), Nine critical elements of promising violence prevention programs. *J Sch Health* 67:409–414
- Eisen M, Pallitto C, Bradner C, Bolshun N (2000), *Teen Risk-Taking: Promising Programs and Approaches*. Washington, DC: Urban Institute
- Flaherty LT, Garrison EG, Waxman R, et al. (1998), Optimizing the roles of school mental health professionals. *J Sch Health* 68:420–424
- Flisher AJ, Kramer RA, Hoven CW et al. (2000), Risk behavior in a community sample of children and adolescents. *J Am Acad Child Adolesc Psychiatry* 39:881–887
- Freud A (1930), The relation between psychoanalysis and education. In: *The Writings of Anna Freud, Volume 1*. New York: International Universities Press, pp 212–233
- Friedman R, Katz-Leavy J, Manderscheid R, Sondheimer D (1996), Prevalence of serious emotional disturbance in children and adolescents. In: *Mental Health, United States, 1996*, Manderscheid RW, Sonnenschein MA, eds. Washington, DC: U.S. Government Printing Office, pp 77–91
- Garland AF, Hough RL, McCabe KM, Yeh M, Wood PA, Aarons GA (2001), Prevalence of psychiatric disorders in youths across five sectors of care. *J Am Acad Child Adolesc Psychiatry* 40:409–418
- Gillham J, Reivich K, Jaycox L, Seligman M (1995), Prevention of depressive symptoms in school children: two-year follow-up. *Psychol Sci* 6:343–351
- Ginsburg GS, Drake KL (2002), School-based treatment for anxious African-American adolescents: a controlled pilot study. *J Am Acad Child Adolesc Psychiatry* 41:768–775
- Grunbaum JA, Gingiss P, Orpinas P, Batey LS, Parcel GS (1995), A comprehensive approach to school health program needs assessments. *J Sch Health* 65:54–59
- Henderson P, Kelbey T, Engerbreston K (1992), Effects of a stress-control program on children's locus of control, self-concept, and coping behavior. *School Counselor* 40:125–130
- Jennings J, Pearson G, Harris M (2000), Implementing and maintaining school-based mental health services in a large, urban school district. *J Sch Health* 70:201–205
- Kalichman SC, Carey MP, Johnson BT (1996), Prevention of sexually transmitted HIV infection: a meta-analytic review of the behavioral outcome literature. *Ann Behav Med* 18:6–15
- Kasen S, Johnson J, Cohen P (1990), The impact of school emotional climate on student psychopathology. *J Abnorm Child Psychol* 18:165–177
- Kataoka SH, Stein BD, Jaycox LH et al. (2003), A school-based mental health program for traumatized Latino immigrant children. *J Am Acad Child Adolesc Psychiatry* 42:311–318
- Kirby D (1997), *No Easy Answers: Research Findings on Programs to Reduce Teen Pregnancy*. Washington, DC: National Campaign to Prevent Teen Pregnancy
- \*Locke DC (1992), *Increasing Multicultural Understanding*. Newbury Park, CA: Sage
- March JS, Amaya-Jackson L, Murray MC, Schulte A (1998), Cognitive-behavioral psychotherapy for children and adolescents with posttraumatic stress disorder after a single-incident stressor. *J Am Acad Child Adolesc Psychiatry* 37:585–593
- Masia CL, Klein RG, Storch EA, Corda B (2001), School-based behavioral treatment for social anxiety disorder in adolescents: results of a pilot study. *J Am Acad Child Adolesc Psychiatry* 40:780–786
- \*Mattison RE (1993), A model for SED case evaluation. In: *Child and Adolescent Mental Health Consultation in Hospitals, Schools, and Courts*, Fritz GK, Mattison RE, Nurcombe B, Spirito A, eds. Washington, DC: American Psychiatric Press, pp 109–130
- \*Mattison RE (2000), School consultation: a review of research on issues unique to the school environment. *J Am Acad Child Adolesc Psychiatry* 39:402–413
- Myers K, Winters NC (2002a), Ten-year review of rating scales. I: overview of scale functioning, psychometric properties, and selection. *J Am Acad Child Adolesc Psychiatry* 41:114–122
- Myers K, Winters NC (2002b), Ten-year review of rating scales. II: scales for internalizing disorders. *J Am Acad Child Adolesc Psychiatry* 41:634–659
- Mytton JA, DiGiuseppi C, Gough DA, Taylor RS, Logan S (2002), School-based violence prevention programs: systematic review of secondary prevention trials. *Arch Pediatr Adolesc Med* 156:752–762

- Ohan JL, Myers K, Collett BR (2002), Ten-year review of rating scales. IV: scales assessing trauma and its effects. *J Am Acad Child Adolesc Psychiatry* 41:1401-1422
- Payton JW, Wardlaw DM, Graczyk PA, Bloodworth MR, Tompsett CJ, Weissberg RP (2000), Social and emotional learning: a framework for promoting mental health and reducing risk behavior in children and youth. *J Sch Health* 70:179-185
- Rappaport N (2001), Emerging models in school consultation. *Child Adolesc Psychiatr Clin N Am* 10:13-24
- Rappaport N, Osher D, Greenberg-Garrison E, Anderson-Katchmark C, Dwyer K (2003), Enhancing collaboration within and across disciplines to advance mental health programs in schools. In: *Handbook of School Mental Health*, Weist M, ed. Baltimore: Lippincott Williams & Wilkins, pp 107-129
- \*Rathvon N (1999), *Effective School Interventions*. New York: Guilford
- Reinecke MA, Ryan NE, DuBois DL (1998), Cognitive-behavioral therapy of depression and depressive symptoms during adolescence: a review and meta-analysis. *J Am Acad Child Adolesc Psychiatry* 37:26-34
- \*Rones M, Hoagwood K (2000), School-based mental health services: a research review. *Clin Child Fam Psychol Rev* 3:223-241
- Rutter M, Maughan B, Mortimore P, Ouston J, Smith A (1979), *Fifteen Thousand Hours: Secondary Schools and Their Effects on Children*. Cambridge, MA: Harvard University Press
- Shaffer D, Garland A, Vieland V, Underwood M, Busner C (1991), The impact of curriculum-based suicide prevention programs for teenagers. *J Am Acad Child Adolesc Psychiatry* 30:588-596
- Stein BD, Jaycox LH, Kataoka SH, Wong M, Tu W, Elliott MN, Fink A (2003), A mental health intervention for schoolchildren exposed to violence: a randomized controlled trial. *JAMA* 290:603-611
- \*Taylor L, Adelman HS (2000), Toward ending the marginalization and fragmentation of mental health in schools. *J Sch Health* 70:210-215
- Vaughan RD, McCarthy JF, Walter HJ, Resnicow K, Waterman PD, Armstrong B, Tiezzi L (1996), The development, reliability, and validity of a risk factor screening survey for urban minority junior high school students. *J Adolesc Health* 19:171-178
- Walter HJ (2001), School-based prevention of problem behaviors. *Child Adolesc Psychiatr Clin N Am* 10:117-127
- Wang M, Haertel G, Walberg H (1997), Fostering educational resilience in inner-city schools. In: *Children and Youth: Interdisciplinary Perspectives*, Walberg H, Reyes O, Weissberg R, eds. Thousand Oaks, CA: Sage, pp 119-140
- Weiss B, Harris V, Catron T, Han SS (2003), Efficacy of the RECAP intervention program for children with concurrent internalizing and externalizing problems. *J Consult Clin Psychol* 71:364-374
- Weist MD (1997), Expanded school mental health services: a national movement in progress. *Adv Clin Child Psychol* 19:319-352
- Winters NC, Myers K, Proud L (2002), Ten-year review of rating scales, III: scales assessing suicidality, cognitive style, and self-esteem. *J Am Acad Child Adolesc Psychiatry* 41:1050-1181
- Witmer L (1896), Practical work in psychology. *Pediatrics* 2:462-471