

# Handbook of Youth Prevention Science

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## 5 Implementing Universal Screening Systems Within an RtI-PBS Context

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Professionals in the field of school psychology, child mental health and special education are well aware of the positive impact that early screening, intervention and prevention efforts can have in successfully reducing later, disruptive behavior disorders among at-risk children and youth (Dodge, 2008; Weissberg, 2005). Current efforts by the National Association of School Psychologists to promote preventive interventions for children and youth on a universal basis are fueled by evidence pointing to the critical period of *school entry* and the need to ensure that every child achieves a good school beginning (NASP Position Statement on Early Childhood Care and Education, 2002).

School success can foster school bonding, engagement, and attachment which, in turn, function as powerful protective influences against later destructive outcomes. That is, they have the potential to operate long-term much like a vaccine or inoculation (Embry, 2002). Comprehensive early intervention approaches involving parents, peers and teachers that are directed toward ensuring a successful start to a child's school career are a proven method for developing these protective influences (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999).

Well-conducted, longitudinal research suggests that much of problem behavior in adolescence has its origins in early childhood (Kazdin, 1987; Loeber & Farrington, 1998; Patterson, Reid, & Dishion, 1992; see also Eddy, Reid, & Curry, 2002). This longitudinal evidence provides empirical support for policies that can positively impact vulnerable children's later lives (a) by addressing risk factors, and their associated behavioral correlates, early on in the child's development; and (b) by developing the academic and social readiness skills that contribute to subsequent school success and social effectiveness (Dodge, 2008; Durlak, 1997; Diperna, Volpe, & Elliott, 2002; Gresham, 2004; Hunter, Hoagwood, Evans, Weist, Smith, Paternite, Horner, Osher, Jensen, & the School Mental Health Alliance, 2005). This early developmental period can be viewed as providing a pivotal window in which to intervene for preventing later potential problems, such as violence, substance abuse, educational failure, adolescent delinquency, and adult criminal involvement. Federal and state policies that support collaborative early intervention approaches, mounted within home, school, and community contexts, are perhaps one of the best hopes we have for preventing and remediating destructive behavior patterns before they become chronic and intractable (Zigler, Taussig, & Black, 1992). In a seminal policy piece on addressing youth violence, Dodge (2008) recently argued persuasively for the universal teaching of social skills and social competence as a promising means of accomplishing this important societal goal.

The RtI framework provides an important context for intervening early on in a child's schooling career as well as early within a negative developmental trajectory—regardless of age. A primary goal of the three-tiered Response to Intervention (RtI) model is to detect those students as soon as possible who are at risk for learning disabilities, low achievement and possibly later school dropout and to provide an appropriate level of intervention for them based upon continuous progress monitoring (see Batsche, Elliott, Graden, Grimes, Kovaleski, & Prasse, 2005; Shinn, 2007). Although the three-tiered RtI logic seems to apply to the prevention and early remediation of behavioral as well as academic problems, RtI is most commonly mentioned in the context of academic supports and the prevention of learning disabilities (see Glover, Diperna & Vaughn, 2007). Experts in the field of Positive Behavior Support (PBS) have recommended adoption of a similar three-tiered model of positive behavior support to prevent and intervene with the full range of problem behavior typically seen in school settings (Frey, Lingo, & Nelson, in press; Sugai & Horner, 2002; Walker et al., 1996).

With the advent of pressures to prevent destructive student outcomes through early intervention programs and supports, there has been a corresponding call for universal screening systems to detect at-risk students early in their school careers and to interrupt the trajectories on which so many find themselves (see Albers, Glover, & Kratochwill, 2007). In addition, a number of school-based professionals, who are working within 3-tier PBS systems and school contexts, have expressed interest in accessing such universal screening systems, for instance, in order to facilitate their efforts at targeting students, within tier 1, who will likely require tier 2 and 3 intervention approaches later on, based upon progress monitoring outcomes. The multi-gating *Systematic Screening for Behavior Disorders* procedure (Walker & Severson, 1990) has been a recent focus of much of this interest. Despite having been available for over a decade and longer, there have been relatively few demonstrations of how universal screening systems can be used effectively within such RtI-PBS contexts.

The purpose of this chapter is twofold: (1) to describe ways in which the SSBD and similar universal screening systems can be effectively utilized within an RtI-PBS school context; and (2) to present a large-scale, case study application of the SSBD that illustrates its use within a court-mandated, child find initiative in a New Orleans regional school district (i.e., the Jefferson Parish Public Schools). The following topics are addressed herein: (a) current status of practices regarding universal screening for behavior problems in schools; (b) sample exemplars of approaches to universal screening for behavior problems in schools; (c) key features of the SSBD universal screening system; (d) recent applications of the SSBD in research contexts; (e) the utility of universal screening systems within RtI-PBS type contexts; and (f) illustration of a multi-year, case study application of the SSBD within a court-mandated initiative to improve services and supports for students experiencing emotional or behavioral disorders (EBD). The chapter concludes with some observations about needed directions for future research, practice and policy on universal screening and prevention.

### **Current Status of Practices Regarding Universal Screening for Behavior Problems in Schools**

It can be argued that school-based methods of identifying students with mental health needs are currently failing. In any given year, only about 1% of the public school population is identified, referred and actually certified as emotionally or behaviorally disordered (EBD) (Kauffman & Landrum, 2008). Yet estimates of the numbers of children and youth experiencing significant mental health problems in need of attention range upwards of 20% of the K–12, school population (see Burns & Hoagwood, 2002; Levitt, Saka, Romanelli, & Hoagwood,

2007). There is scant evidence that either of these percentages has shown appreciable movement in the past decade (Walker, Nishioka, Zeller, Severson, & Feil, 2000; Walker, Severson, & Seeley, in press).

From the available evidence regarding current practices, it appears that the relative absence of school-based, proactive identification procedures and persistent inconsistencies in decision-making are key contributors to the low rates at which EBD students are identified and served. Further, the tepid investments in early detection initiatives by educational gatekeepers to date have often led to a reduced capacity to mount effective prevention efforts. As a result, children with EBD are identified much too late in their school careers at which point intervention efforts are likely to be less successful and also come at increasing cost. The primary outcome of these practices is very often "too little, too late" (Albers, Glover, & Kratochwill, 2007).

Kauffman (1999; 2005) has insightfully examined barriers to the mounting of universal screening systems for detecting behaviorally at-risk students in school settings. Obstacles he has identified include: (1) the stigma of being identified as behaviorally at-risk and labeled EBD in order to qualify for services; (2) cost savings in order to avoid the expense of referral and certification as EBD; (3) the possibility of lawsuits by parties dissatisfied with available or provided services; and (4) the often nettlesome burdens of complying with IDEA bureaucratic requirements associated with certification as EBD. Another likely restraint on the early detection of EBD students concerns the reluctance of many teachers to refer behaviorally at-risk students as such referral may be interpreted as an indication of weak classroom management skills. Research on teacher referral practices indicates that teachers are the primary gatekeepers of both academic and behavioral referrals and while they are prone to make academic referrals early, they tend to delay behavioral referrals well into the upper elementary and the middle school grades (see Walker, Nishioka, et al., 2000). In addition, general education teachers typically under refer **externalizing** students and rarely refer **internalizing** students (Lloyd, Kauffman, Landrum, & Roe, 1991; Walker et al., 2000). These trends and practices coalesce to validate Kauffman's claim that we actually "prevent prevention rather efficiently" (Kauffman, 1999).

### **Sample Exemplars of Approaches to Universal Screening for Behavior Problems in Schools**

Although Albers et al. (2007) note that additional research is needed on the feasibility, efficacy, cost, and consumer acceptance of universal screening approaches, a substantial amount of research and development work has been invested in universal screening approaches since the mid-1990s. In our view, a strong level of innovation is apparent in these efforts and the field of education greatly underutilizes the potential benefits of many of these advances. Some examples of these universal screening methods are briefly described below. These methods are based upon a diverse array of information sources including teacher informants, archival school records, and *in vivo* behavioral observations.

#### ***Teachers' Use of Nominations and Likert Rating Scales***

Teacher appraisal of student behavior, based on Likert rating scales, have been a relatively popular approach in the evaluation of students referred for social, emotional, and behavioral problems (see Merrell, 1999, 2001). Such Likert scales typically ask the rater to assess students' behavior along three-, five-, or seven-point dimensions of problem frequency or severity.

Hundreds of such scales are in use and evaluations of many of them can be accessed through the *Buros Mental Measurements Yearbook* (Geisinger, Spies, Carlson, & Plake, 2007), which annually reviews newly developed scales. The *Child Behavior Checklist* (Achenbach, 1991) has become the rating scale gold standard for measuring child and youth psychopathology and is, by far, the most widely used instrument for this purpose. Merrell (1999) has contributed a comprehensive analysis of assessment instruments for use in social, emotional, and behavioral domains.

In addition to their relatively unsystematic use, critics of teacher rating instruments point to their global and relatively crude assessment properties (e.g., "How many fidgets are there in pretty much?"). Others argue that the sensitivity of teacher ratings pales in comparison to more direct measures such as *in vivo* behavioral observations. In spite of these criticisms, teacher ratings continue to be a widely used and important source of information in child screening, identification, and evaluation processes. Teacher ratings have the advantage of defining and pinpointing the behavioral content of a student's perceived adjustment problems, are based upon many hours of teachers making social comparisons among students, and can be standardized so as to enable valid comparisons as referenced to normative age and gender scores. Merrell (2001) has pointed out that Likert behavioral ratings have a number of additional advantages. For example, they (a) are relatively inexpensive; (b) provide essential information on low-frequency behavioral events of potential importance; (c) are relatively objective and reliable, especially when compared to interview and projective assessment methods; (d) can assess individuals who are unable to contribute self-reports; (e) take into account the many observations and judgments of child behavior made by social agents within natural settings over the long term; and (f) reflect the judgments of expert social informants who are familiar with the student's behavioral characteristics (i.e., parents, teachers, peers).

In school-based practice, general education teachers are typically asked to nominate behaviorally at-risk students (often in the absence of specific criteria for nomination) and then to follow up with Likert ratings for each nominated student on a scale such as the *Achenbach Behavior Checklist* or the *Social Skills Rating System* (Gresham & Elliott, 1990). If a student's profile is within the clinical range on the Likert scale being used, he or she is then considered for further evaluation, possible certification and/or services and supports.

Drummond (1993) has developed an intriguing matrix system, based on Likert teacher ratings, that is designed to screen entire classrooms of students for their risk status in relation to antisocial behavior patterns. In this universal screening approach, every student in the teacher's classroom is rated on a set of seven indicators of antisocial behavior. Drummond's *Student Risk Screening Scale* (SRSS) is a cost-efficient and popular procedure for quickly screening entire classrooms. A matrix format is used that has seven behavioral descriptors across the top of the rating form and students' names down the left side (see Figure 5.1). The classroom teacher assigns every student a Likert rating, ranging from 0 = never to 3 = frequently, for each of these seven items of the SRSS: (1) stealing; (2) lying, cheating, sneaking; (3) behavior problems; (4) peer rejection; (5) low academic achievement; (6) negative attitude; and (7) aggressive behavior. Teachers compare each student against all other students in the classroom as they rate each item. The SRSS is a brief, research-based, easily understood, reliable, valid, and cost-efficient instrument. The SRSS was recently investigated in a study of 674 high school students by Lane, Kalberg, Parks, and Carter (2008) and found to have acceptable psychometric characteristics.

The major advantages of the SRSS are that (a) all students are systematically screened and evaluated; (b) it accomplishes universal screening; and (c) normative social comparisons are facilitated by requiring the teacher to evaluate *all* students on each item at the same time rather

Sample student risk screening scale (SRSS)  
Screening form for an entire class

| Names | Items    |                           |                   |                |                          |                   |                     | Totals |          |
|-------|----------|---------------------------|-------------------|----------------|--------------------------|-------------------|---------------------|--------|----------|
|       | Stealing | Lying, cheating, sneaking | Behavior problems | Peer rejection | Low academic achievement | Negative attitude | Aggressive behavior |        |          |
| Susan | 0        | 0                         | 1                 | 1              | 1                        | 0                 | 0                   | 3      | Low      |
| Jamie | 3        | 0                         | 1                 | 2              | 0                        | 1                 | 1                   | 8      | Moderate |
| Fred  | 1        | 1                         | 3                 | 3              | 2                        | 3                 | 3                   | 16     | High     |

Levels of Risk: High risk = 9–21; Moderate risk = 4–8; Low risk = 0–3  
Scale: 0 = Never to 3 = Frequently

Figure 5.1 Sample Student Risk Screening Scale (SRSS) Screening Form for an Entire Class.

than rating individual students on a series of items on a case-by-case basis. The SRSS thus affords every student an equal chance to be evaluated in relation to the seven SRSS items. A matrix system of this type is also ideally suited for the classwide assessment and pre-post evaluation of instruction for all students in a series of social skills. A more complete description of the SRSS and its potential applications is provided in Walker, Colvin, and Ramsey (1995) and Sprague and Walker (in press).

#### Critical Behavioral Events

Critical behavioral events refer to episodes having great intensity, salience and social impact; they include but are not limited to **assault, fire -setting, self-injury, exposing oneself, stealing, cheating, bullying**, and so on (Todis, Severson, & Walker, 1990). Research by Walker and his colleagues on mainstreaming and social integration shows that such behavioral events (1) are unacceptable to teachers in the extreme; (2) are likely to prompt teacher efforts to have the student displaying them permanently removed from the classroom; and (3) differentiate at-risk students in terms of the severity of their behavioral adjustment problems (Walker, 1986). These critical behavioral events have been characterized as “behavioral earthquakes” because of their disruptive influence on classroom ecology. The importance of critical events is derived from their severity and their potential destructiveness to the individual and other social agents. The impact of critical events is not dependent upon their frequency of occurrence but rather determined by the fact that they occur *at all*. These are very rare occurrences in the behavioral repertoires of typically developing children and youth but are not all that infrequent in the lives of some behaviorally at-risk individuals.

Gresham, MacMillan, and Bocian (1996) conducted a study of the *Critical Events Index* (CEI) in their use of the SSBD screening procedure within a larger study of the social-affective status of at-risk students. The CEI was used to identify three groups of students from an elementary-aged student sample based upon the groups' total number of critical events: (a) high-risk ( $n = 30$ ), (b) moderate-risk ( $n = 55$ ), and (c) low-risk ( $n = 30$ ). These groups were then contrasted on a series of cognitive/achievement, social competence, externalizing behavior, and school history variables as derived from searches of archival school records of individual students. Multivariate and univariate analysis procedures showed that the three at-risk groups were differentiated primarily on social competence and externalizing behavioral measures.

However, a series of cross-validated, stepwise discriminant function analyses, contrasting the high- and low-risk groups only, and using combinations of social competence, externalizing, internalizing, and school history variables, correctly identified over 85% of the high-risk group and 78% of the low-risk group. Gresham et al. (1996) recommend inclusion of critical events measures within multi-method assessments of at-risk, behavioral status and they view these events as "vital signs" indicative of childhood psychopathology.

Blechman and Hile (in press) make the following observations regarding critical events:

- (1) Student involvement in critical events provides a bias-free screen for the detection of at-risk students in the general or universal student population; and
- (2) Systematic documentation of *all* critical events provides the most effective and least expensive method of screening for at-risk students.

They note further that reliance upon readily available information from archival student records within screening efforts reduces costs, increases feasibility, and avoids extraordinarily adverse consequences to students. Blechman and Hile (in press) define critical events in their work as including school and criminal offenses, threats of violence or suicide, suicide attempts, and caregiver requests for assistance with behavior management. They argue that these events offer a useful and inexpensive predictor of future and more serious critical events. The work of these authors reflects an increasing trend toward using critical behavioral events in screening practices, as either rated by knowledgeable informants or culled from existing archival records.

### **Archival School Records**

If the early preschool detection of behavior problems is not possible, school records can provide an additional valuable source of screening information as students move through the primary and intermediate grades. Archival school records that accumulate as a natural part of the schooling process provide a rich and inexpensive information source regarding a range of school adjustment problems and also provide a record of the manner in which schools try to cope with such problems. Because these records build naturally as an ordinary part of the schooling process, they are relatively unobtrusive and far less reactive than typically recorded assessments (e.g., teacher ratings, *in vivo* behavioral observations, sociometric measures). Our experience shows that they become more complete as students progress through the intermediate grades and into middle school settings.

Walker and his colleagues developed the *School Archival Records Search (SARS)* procedure (see Walker, Block-Pedego, Todis, & Severson, 1991) to accomplish the coding, analysis, and aggregation of archival school records. SARS provides for the systematic coding of 11 archival variables, which can then be analyzed individually or aggregated into domain scores that provide profiles of student status in three areas of school adjustment: *disruption, needs assistance, and low achievement*. The individual SARS variables that are coded comprise the following: **number of different schools attended, days absent, low achievement, grades retained, academic/behavioral referrals, current Individualized Educational Program (IEP), nonregular classroom placement, Title I, referrals out of school, negative narrative comments, and school discipline referrals**. In the context of schooling, archival school records are the closest proxy we have for police contacts and juvenile records that are used in evaluating delinquency prevention programs and in validating measures that purport to predict later delinquent acts.

Disciplinary referrals of students to the front office, as reflected in archival school records,

have emerged as a very useful measure for assessing overall school climate and for identifying student groups and individuals who are in need of behavioral supports and intervention (see Irvin, Tobin, Sprague, Sugai, & Vincent, 2004; Tobin & Sugai, 1999; Walker, Stieber, Ramsey, & O'Neill, 1993). Sugai, Horner, and their colleagues have conducted extensive research on this topic in the past five years. Sugai et al. (2000) reported normative data profiles on disciplinary referrals involving a sample of 11 elementary schools and nine middle/junior high schools. These elementary schools averaged 0.5 disciplinary referrals per student per school year. At the middle/junior high school level, however, students being referred to the principal's office due to disciplinary infractions was a very common occurrence. In the Sugai et al. study, the elementary schools averaged 566 students enrolled and 283 disciplinary referrals within a school year; in contrast, the middle/junior high schools averaged 635 students and 1,535 disciplinary referrals within a school year.

These authors also analyzed some of the patterns that existed within this pool of disciplinary referrals. Based on their analysis, they argue that such patterns can guide the direction and focus of intervention approaches for addressing chronic behavior problems within the school setting (i.e., targeting the whole school, small groups, and/or individual students). For example, at the elementary level, Sugai, Sprague, Horner, & Walker (2000) found that the top 5% of students with the most discipline referrals also accounted for 59% of total disciplinary referrals within the school; at the middle/junior high level, the top 5% accounted for 40% of all discipline referrals. These figures closely parallel outcomes for juvenile crime where 6 to 8% of all juveniles typically account for 60 to 65% of all delinquent acts (Loeber & Farrington, 1998). According to Sugai et al., elementary-aged students with five or more disciplinary referrals within a school year are considered to be behaviorally at risk; those with 10 or more such referrals are considered to be chronic discipline problems who may be severely at risk for both in-school and out-of-school destructive outcomes.

Recording and utilizing disciplinary referrals to identify at-risk students and to guide intervention applications requires the computerization of school records. Horner and his associates have developed the *School Wide Information System (SWIS)* procedure, which is a web-based computer application for entering, organizing, and reporting office discipline referrals found within schools (May, Ard, Todd, Horner, Glasgow, & Sugai, 2001). SWIS computerizes discipline referrals and is a valuable tool for use by teachers and school administrators in collecting and analyzing discipline-related information. Perhaps the advantage of the SWIS procedure is that it systematizes and standardizes the process of documenting, recording and reporting on disciplinary referrals.

Figure 5.2 illustrates the *SWIS Office Referral Form*, which is completed for each disciplinary referral made by a teacher to the school office. This referral form documents each disciplinary episode for which a front office referral is initiated by the teacher. The SWIS referral form describes the location, specific problem behavior, and possible motivation for the behavior, the resulting administrative decision, and other persons who were involved in the incident. Parents are asked to sign and date the referral form to indicate that they have knowledge of the incident, the referral, and its disposition.

SWIS is an important advance in the computerization of archival school records that allows individual schools to profile themselves in relation to disciplinary practices and their resulting effects. It can be used also as a measure of certain aspects of school reform efforts, as a measure of the school's climate, as a pre-post measure of schoolwide interventions, and as a vehicle for guiding and targeting allocation of intervention resources to small groups and individuals. It is also recommended as a schoolwide, behavioral screening device to identify those students who are experiencing serious to chronic school adjustment problems.

| SWIS™ OFFICE DISCIPLINE REFERRAL FORM                           |   |  |   |                                      |
|---|---|--|---|--------------------------------------|
| Student(s) _____  | Referring Staff _____   | Grade Level _____  | Date _____  | Time _____                           |
| <b>Location</b>   |   |  |   |                                      |
| <input type="checkbox"/> Classroom                              | <input type="checkbox"/> Cafeteria  | <input type="checkbox"/> Bus loading zone                  | <input type="checkbox"/> Other _____              |                                      |
| <input type="checkbox"/> Playground                             | <input type="checkbox"/> Bathroom/restroom                                      | <input type="checkbox"/> Parking lot                       |   |                                      |
| <input type="checkbox"/> Commons/common area                    | <input type="checkbox"/> Gym  | <input type="checkbox"/> On bus                            |   |                                      |
| <input type="checkbox"/> Hallway/breezeway                      | <input type="checkbox"/> Library  | <input type="checkbox"/> Special event/assembly/field trip |   |                                      |
| <b>Problem Behaviors (check the most intrusive)</b>             |   |  |   |                                      |
| <input type="checkbox"/> MINOR                                  | <input type="checkbox"/> MAJOR  | <input type="checkbox"/> Skip class/truancy                | <input type="checkbox"/> Vandalism                |                                      |
| <input type="checkbox"/> Inappropriate lang.                    | <input type="checkbox"/> Abusive lang./inapprop. lang.                          | <input type="checkbox"/> Forgery/theft                     | <input type="checkbox"/> Property damage          |                                      |
| <input type="checkbox"/> Physical contact                       | <input type="checkbox"/> Fighting/physical aggression                           | <input type="checkbox"/> Dress code                        | <input type="checkbox"/> Bomb threat              |                                      |
| <input type="checkbox"/> Defiance/disrespect/<br>non-compliance | <input type="checkbox"/> Defiance/disrespect/insubordin-<br>ation/non-compliant | <input type="checkbox"/> Lying/cheating violation          | <input type="checkbox"/> Arson                    |                                      |
| <input type="checkbox"/> Disruption                             | <input type="checkbox"/> Harassment/ tease/taunt                                | <input type="checkbox"/> Tobacco                           | <input type="checkbox"/> Weapons                  |                                      |
| <input type="checkbox"/> Property misuse                        | <input type="checkbox"/> Disruption   | <input type="checkbox"/> Alcohol/drugs                     | <input type="checkbox"/> Other _____              |                                      |
| <input type="checkbox"/> Other _____                            | <input type="checkbox"/> Tardy  | <input type="checkbox"/> Combustibles                      |   |                                      |
| <b>Possible Motivation</b>                                      |   |  |   |                                      |
| <input type="checkbox"/> Obtain peer attention                  | <input type="checkbox"/> Avoid tasks/activities                                 | <input type="checkbox"/> Don't know                        |   |                                      |
| <input type="checkbox"/> Obtain adult attention                 | <input type="checkbox"/> Avoid peer(s)  | <input type="checkbox"/> Other _____                       |   |                                      |
| <input type="checkbox"/> Obtain items/ activities               | <input type="checkbox"/> Avoid adult(s)   |  |   |                                      |
| <b>Others Involved</b>  |   |  |   |                                      |
| <input type="checkbox"/> None                                   | <input type="checkbox"/> Peers  | <input type="checkbox"/> Staff                             | <input type="checkbox"/> Teacher                  | <input type="checkbox"/> Substitute  |
|   |   |  |   | <input type="checkbox"/> Unknown     |
|   |   |  |   | <input type="checkbox"/> Other _____ |
| <b>Administrative Decision</b>                                  |   |  |   |                                      |
| <input type="checkbox"/> Time in office                         | <input type="checkbox"/> Detention  | <input type="checkbox"/> Saturday School                   | <input type="checkbox"/> In-school suspension     |                                      |
| <input type="checkbox"/> Loss of privilege                      | <input type="checkbox"/> Parent contact   | <input type="checkbox"/> Individualized instruction        | <input type="checkbox"/> Out-of-school suspension |                                      |
| <input type="checkbox"/> Conference with student                | <input type="checkbox"/> Other _____  |  |   |                                      |
| <b>Comments:</b>  |   |  |   |                                      |
| <b>Follow up comments:</b>                                      |   |  |   |                                      |

Figure 5.2 SWIS Office Discipline Referral Form.

### Behavioral Observations

Behavioral observations recorded in natural settings (e.g., homes, classrooms, playgrounds, hallways) remain the preferred assessment method of most behavior analysts for assessing the behavior problems of students. In typical school usage, the teacher referral process requires that a school psychologist, or other related-services professional, directly observe the target student in a setting or context in which the problem behavior occurs (i.e., the referral setting). A wide range of coding systems and recording procedures are used for this purpose. However, the vast majority of them do not have adequate technical data or information to support their use(s). In addition, most of these codes lack local, state, or national norms that are appropriate for making social comparisons among students (see Leff & Lakin, 2005, for a recent review).

It should be noted that behavioral observations are rarely used for universal screening purposes due to their labor-intensity and high cost. Much more typically they are used in

conjunction with teacher nominations and ratings to develop a more complete picture of the target student, to verify teacher impressions or ratings of the student, and to document the nature, estimated frequency, and topography of the behavior problems cited in a referral.

Teacher referrals are often based upon discrete behavioral events of high intensity or salience (e.g., insubordination, teacher defiance) that may be missed within the narrow window of *time* and *occasions* sampling that most such observations involve. Naturalistic behavioral observations are also vulnerable to observer bias and expectancy effects that can be induced by the observer's prior knowledge of the case. Further, direct observations are time-consuming and labor-intensive in that they usually require considerable planning and careful monitoring if they are conducted effectively (see Merrell, 2001).

In spite of these downsides, naturalistic behavioral observations remain popular among school professionals and they do have an important role to play in the screening-identification process *if* they are incorporated into a comprehensive assessment process that involves other, less expensive measures (e.g., teacher nominations, rankings, ratings, archival records searches, etc.). We do not recommend their use in isolation; but rather that they constitute an important component of a multi-agent, multi-method, and multi-setting assessment approach to the screening-identification process (Merrell, 1999).

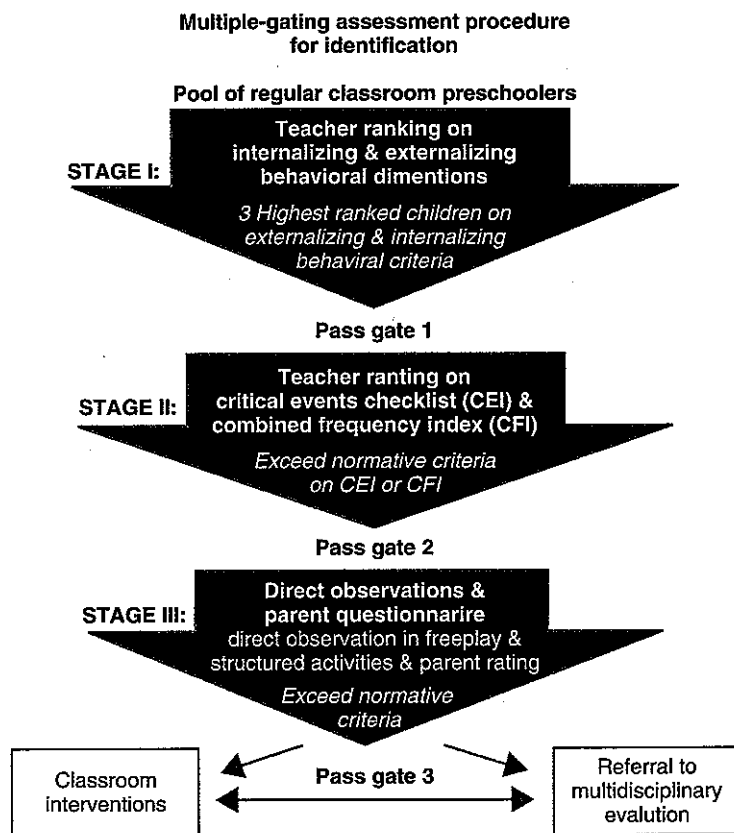
All of the approaches described above have some degree of applicability to universal screening within an RtI-PBS context—some more than others. Behavioral observations and Likert teacher ratings have the most relevance in progress monitoring and decision-making regarding moving a student into more intensive levels of intervention and remediation. Archival school records, critical behavioral events and office disciplinary referrals, because of their low frequency and high salience, are much less sensitive and are more useful for initially identifying those students who are less likely to respond to a universal intervention. Some guidelines and recommendations for the use of universal screening procedures within RtI-PBS type contexts are discussed in the sections that follow.

### Key Features of the SSBD Universal Screening System

Walker and Severson (1990) developed the Systematic Screening for Behavior Disorders (SSBD) screening procedure for use with elementary-age children (K–6 grades) based upon a conceptual model, and corresponding empirical findings, documenting that children's problem behavioral characteristics could be divided reliably into "externalizing" (e.g., aggressive, hyperactive, noncompliant, antisocial, etc.) and "internalizing" dimensions (e.g., shy, phobic, depressed, anxious, isolated from peers, etc.) (see Achenbach, 1991; Ross, 1980). The SSBD was patterned after screening models developed and validated by Greenwood, Walker, Todd, and Hops (1979) for the preschool screening of children at risk for social withdrawal and by Loeber, Dishion, and Patterson (1984) for the screening of adolescents at risk for later delinquency. The SSBD is a proactive, universal screening procedure that provides each student with an equal chance to be screened and identified for either externalizing or internalizing behavior disorders. The SSBD procedure consists of three interconnected screening stages or gates where movement through each gate is required for consideration at the next gate. Most students are screened out in the initial SSBD gates (i.e., gates 1 or 2) because they do not meet the behavioral criteria necessary to proceed to the next phase of screening. Walker and Severson began their first trial testing of the SSBD in the mid-1980s and conducted extensive research, supported by a series of federal grants, on this screening system prior to its publication in 1990 (Walker, Severson, Stiller, Williams, Haring, Shinn, & Todis, 1988; Walker, Severson, Todis, Block-Pedego, Williams, Haring, & Barckley, 1990).

Figure 5.3 illustrates the three screening gates of the SSBD. In gate 1, teachers are asked to think about all students in their class and to nominate those students whose characteristic behavior patterns most closely match either the externalizing or internalizing behavioral definitions provided for them. The three highest-ranked externalizing students and the three highest-ranked internalizers then move to screening gate 2 where their behavior is more specifically rated by the teacher on a 33-item Critical Events Index (CEI) and on an Adaptive (11 items) as well as a Maladaptive (12 items) Likert rating scale that requires estimates of frequency of occurrence.

Students who exceed national, normative cutoff scores on these measures move on to an optional screening gate 3 where they are observed in classroom and playground settings. Using a direct observation procedure, a school professional (school psychologist, counselor, or behavioral specialist) observes and codes each target child's behavior for two 20-minute sessions in the regular classroom. A stopwatch measure of Academic Engaged Time (AET) is used for this purpose. The Peer Social Behavior (PSB) code is used to record the level, quality, and distribution of the target student's peer-related, social behavior at recess during two 20-minute, observation sessions.



Adapted from: Feil, E., Severson, H. and Walker, H. (1994).  
Early screening project: Identifying preschool children with adjustment problems.  
*The Oregon Conference Monograph*. Vol. 6.

Figure 5.3 SSPD/ESP Multiple Gating Procedure.

Normative data for the SSBD gate 2 instruments consist of over 4,000 cases representing the four U.S. census zones. The SSBD user's manual also provides normative observation data for the AET and PSB codes involving over 1,300 cases for each code—also collected across the four census zones.

Those students who exceed national, normative cutoff points on the AET and PSB codes are considered to have serious problems and are usually referred for further evaluation to specialized, school-based services. As a rule, an archival records search is conducted at this point to provide further confirmation of results of the screening-identification process and serves as a further source of information for decision-making.

The first two screening gates of the SSBD can be completed by the classroom teacher in approximately one to 1½ hours. Completion of the gate 2 screening tasks typically identifies one externalizer in every classroom and one internalizer in every two or three classrooms. The time involved in conducting SSBD screening assessments increases as one moves through the screening stages; however, the number of students who are the targets of those assessments is greatly reduced from gates 1 to 3. It is recommended that universal SSBD screenings be conducted twice a year—once in the fall and once in the spring (e.g., in October and February) to identify students in need of intervention supports and services, to maximize the sensitivity of school staff to initial behavior problems in the fall of the school year, and to detect emerging behavior problems later in the school year. The SSBD has been extensively researched and has excellent psychometrics (see Severson, Walker, Hope-Doolittle, Kratochwill, & Gresham, 2007; Walker & Severson, 1990; Walker, Severson, Nicholson, Kehle, Jenson, & Clark, 1994).

### Recent Applications of the SSBD in Research Contexts

The SSBD has been used as an initial behavior screen in two multi-site federal initiatives funded by the U.S. Office of Special Education Programs within the past decade. These initiatives are: (1) the National Reading and Behavior Centers Program, and (2) the National Behavior Research Centers Program. Coordination and technical assistance supports were provided for these two initiatives respectively by the University of Wisconsin (Elliott & Kratochwill) and by SRI (Wagner, Woodbridge, & Sumi). In these applications, the SSBD was used primarily as a universal screening instrument to identify appropriate candidates for inclusion in RtI-PBS interventions and, in some cases, as measures of pre-post outcomes. Use of the SSBD in a standardized fashion across the varied implementation-data collection sites comprising these programs of research provided substantial advantages in identifying comparable sample populations and in improving the external generalizability of empirical findings.

There have been some recently reported SSBD studies by investigators who are engaged in individual programs of research and development involving student populations that are behaviorally and/or academically at risk. For example, Walker, Cheney, Stage, Blum and Horner (2005) used the SSBD as a primary means of identifying their intervention sample of target students ( $n=1,540$ ). They concluded that students at risk of school failure are best identified by monitoring school discipline referrals and use of the SSBD screening process. Kathleen Lane and her associates have conducted an extensive series of studies using the SSBD as a primary vehicle of instrumentation with this same at-risk population and found it to be an effective instrument for the identification of students from this population in need of intervention supports and services (see, for example, Lane 2007; Lane, Parks, Kalberg, & Carter, 2008). To date, Lane and her associates have assembled an SSBD data base of approximately 7,000 cases at elementary and middle school levels.

Caldarella, Young, Richardson, Young, and Young (2008) recently reported an investigation in which they evaluated the SSBD screening procedure for use with middle and junior high school students ( $n=123$ ). They reported that their study provided evidence for the reliability and validity of SSBD teacher ratings of early adolescent students who are behaviorally at risk.

Collectively, these studies are encouraging in that they validate the SSBD's use as a research instrument in identifying target student populations who share behavioral characteristics across diverse participating sites. They also serve to extend the SSBD's effective range of application with adolescent student populations and validate its use as a criterion in evaluating other screening instruments (see Lane et al., 2008).

### Applications of Universal Screening Systems Within RtI-PBS-Type Contexts

In 1996, Walker and his colleagues adapted the U.S. Public Health classification system governing prevention outcomes for use as a scaffold in coordinating the integrated delivery of behavioral interventions within school settings (Walker, Horner, Sugai, Bullis, Sprague, Bricker, & Kaufman, 1996). The goal of this adaptation was to enable the coordination and integration of differing intervention approaches (i.e., primary, secondary, tertiary) and to maximize the resources needed to respond to the needs and problems of the three groups of students found within any school or preschool setting: (1) those who are not at risk and are progressing normally; (2) those who have mild to moderate risk status; and (3) those who are severely at risk. This classification schema allows schools to (1) address all three types of prevention goals and outcomes (primary, secondary, tertiary) in a coordinated fashion across these three groupings of students; (2) deliver positive behavioral supports and services in a cost-effective manner to all who need them; and (3) create and sustain a positive school climate and social ecology that provide a supportive context for teaching and strengthening school expectations governing student conduct (e.g., be safe, be respectful, be responsible). Figure 5.4 illustrates this classification schema along with some of the universal, selected and indicated interventions that are used to achieve respectively primary, secondary and tertiary prevention outcomes.

This model of service delivery defines prevention as a goal or outcome of intervention rather than as an approach (Walker, Ramsey, & Gresham, 2004). Differing intervention types are used to achieve specific prevention goals and outcomes. For example, primary interventions are directed toward achieving outcomes in which the goal is to keep problems from emerging. Secondary interventions are used to achieve goals and outcomes where the focus is on reducing or eliminating the emergent problems of already behaviorally at-risk students. Finally, tertiary interventions produce focused outcomes for student populations having severe risk status. This delivery model allows for a more cost-effective use of available, school-based resources. The schema or heuristic in Figure 5.4, sometimes referred to as the teaching pyramid, has also been adapted for use in coordinating interventions for very young preschool children by Fox, Dunlap, Hemmeter, Joseph, and Strain (2003).

The SSBD screening system parallels and lines up seamlessly with the three-tiered model of increasingly intensive intervention approaches that are built into the RtI model. For instance, as one moves through the sequential SSBD gates, those students who remain in the screening pool (i.e., are not screened out) are more likely to be candidates for secondary and tertiary-level PBS interventions and supports (Walker, Severson, & Seeley, in press). In particular, those students who have positive profiles on the *Critical Events Index* at screening gate 2 may be especially at risk and in need of intensive, indicated interventions at the tertiary level. Further, the screening tools and procedures of the three SSBD screening gates also parallel assessment needs at each of the three-tiered levels within the RtI model.

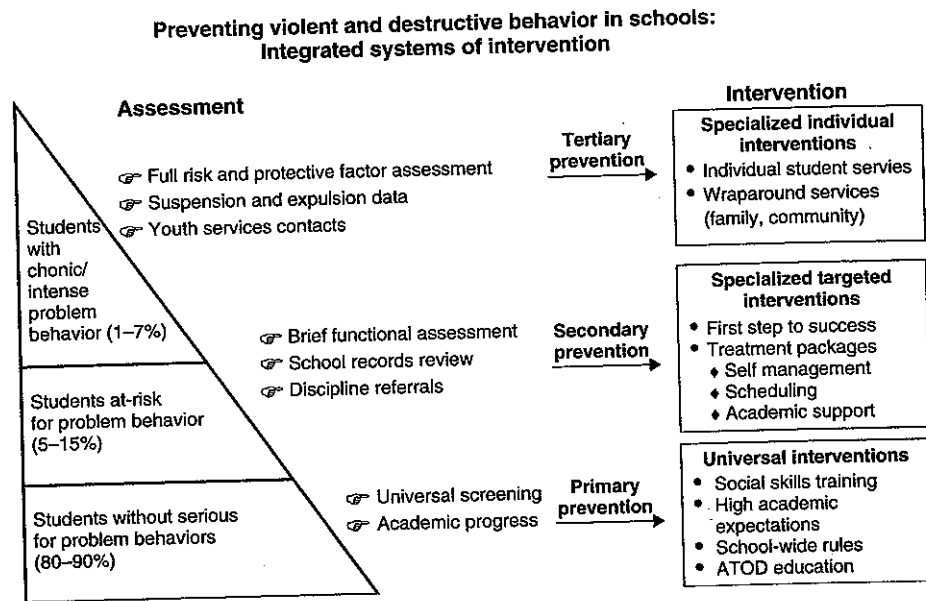


Figure 5.4 Preventing Violent and Destructive Behavior in Schools.

There are at least five potential applications of a universal screening system like the SSBD within an RtI-PBS context. They include: (1) universal screening to identify candidates who will likely need exposure to secondary and tertiary-level interventions; (2) assessments to monitor progress within PBS tiers and for determining whether the student should move to a different level of intervention and support; (3) as a source of information for designing interventions at both group and individual levels; (4) as a tool for planning staff development training and technical assistance initiatives based on analysis of teacher ratings of behavioral deficits and excesses collected at screening gate 2 for at risk students; and (5) as one index of how well a school-wide intervention is functioning based on the severity of gate 2 SSBD behavioral profiles of teacher-nominated students within a single classroom or a series of classrooms in a school. That is, those students who pass out of screening gate 2 should be fewer in number and have less problematic behavioral profiles, compared to national norms, if a schoolwide behavioral intervention is operating effectively.

The case study described below is an example of the SSBD being used within an RtI-PBS context and nicely illustrates this type of SSBD application. Naquin and D'Atorio of the University of New Orleans describe how they integrated the SSBD screening system into a larger assessment battery that provides multiple information sources on the impact of their Pupil Assistance Model in addressing the needs and challenges of behaviorally at-risk students and their teachers.

#### **Illustration of a Multi-Year, Case Study Application of the SSBD Within a Court-Mandated Initiative to Improve Services and Supports for EBD Students**

The material herein describes an actual application of the SSBD screening procedure within an RtI-PBS context for the purpose of responding to the mandates of a court-ordered child find process. Specifically, this court-ordered initiative was prompted by a continuing failure of

a Louisiana School District (Jefferson Parish Public Schools) to adequately screen, identify, place and serve students who are at risk for emotional and behavioral disorders (EBD) within general education settings. The SSBD fulfilled a number of purposes in this multi-year process including: (1) serving as a child find-screening process; (2) providing a template for developing staff training regimens for participating schools; and (3) evaluating outcomes. Details of this initiative follow.

### ***Description of Jefferson Parish Public Schools***

The Jefferson Parish Public School System (JPPSS) is a local education agency in the Greater New Orleans Region and forms the largest metropolitan area in Louisiana. According to the U.S. Census Bureau, as of July 1, 2007, the Greater New Orleans population was 704,010. At that time, the population in Jefferson Parish was reported to be 423,520 persons based upon approximately 98% of the population reported by the Census in 2000. In addition to being the largest metropolitan area in Louisiana, JPPSS ranks as the largest school district in the state.

JPPSS consists of 88 schools located on the east and west banks of the Mississippi River in Jefferson Parish. Student enrollment during the 2007–2008 school year was 44,019 students enrolled in kindergarten through the 12th grade. JPPSS student enrollment currently is comprised of 33% Caucasian and 67% minority students with 61.9% of the students participating in the free or reduced lunch program. JPPSS is recognized as having the largest limited English-proficient student population in Louisiana with more than 2,500 students eligible for services. These students represent more than 68 countries with 52 spoken languages. There are 36 non-public schools located in Jefferson Parish that serve an additional 18,883 students in the community.

### ***Background of the CAP Initiative***

The Pupil Assistance Model (PAM) team at the University of New Orleans (Naquin & D'Atrio) began working in JPPSS elementary schools in 2000 providing staff development and consultation services. By 2003, the PAM team began to focus consultative services on the implementation of a Response to Intervention (RtI) model. At that time, services were provided in 10 identified "vanguard" schools and assistance focused on the identification of students needing intervention in the areas of reading and mathematics.

*JPPSS Corrective Action Plan—2005.* Implementation of the current PAM-RtI/PBS model in JPPSS was facilitated by the issuance of a Corrective Action Plan (CAP) that resulted from monitoring of the district conducted by the Louisiana Department of Education during 2005. In the Mediated Settlement Agreement, the administrators of the CAP identified nine areas in need of remediation as described below.

The first goal stipulated that teachers and administrators in JPPSS be urged to comply with all conditions of the CAP and that parish personnel be educated about provisions of each goal. Second, and central to the core findings of the Settlement Agreement, was that JPPSS "develop, devise, and implement an effective positive behavioral intervention and support program for all students." The stated intent of implementing such a program would also indirectly increase the access that students with EBD would have to the general education setting. Thus, in response to the requirements of goal 2, JPPSS adopted a Positive Behavior Support model for the entire school district and the associated training initiatives recommended by the Louisiana Department of Education.

Goal 3 pertained to restructuring of the special education pre-referral process. While Louisiana had established School Building Level Committee (SBLC) teams at every school (as mandated by law), their intended functions as problem-solving bodies were never fully executed. Historically, the SBLC system resulted in a "test and place" process that simply facilitated the placement of students into special education. At the time that the CAP was initiated, a very high percentage of referrals to the existing SBLCs resulted in identification and placement into a special education setting. Research conducted by Algozzine, Ysseldyke, and their colleagues has indicated that approximately 97% of all referrals to SBLCs have resulted in identification and placement into a special education setting (Algozzine, Ysseldyke, & Christenson, 1983; Ysseldyke, Vanderwood & Shriner, 1997). Additionally, and perhaps just as alarming, was the finding that JPPSS had over 2½ times as many students with EBD (12.8%) as the state average (4.5%) (Louisiana Department of Education, 2005).

Goal 3 of the CAP also required that the existing SBLC process be redefined and reorganized into a true problem-solving model that used evidence-based interventions. Thus, the SBLC teams in JPPSS were renamed as the Academic and Behavior Intervention Teams (ABITs), with school-level participation being required of at least three regular education teachers, two special education experts (which could include members of the Pupil Appraisal Unit) and a school administrator.

The CAP also called for implementation of a three-tiered Response to Intervention (RtI) model of service delivery that operated within the context of general rather than special education. The purpose of this change was to create an effective, cost-efficient and responsive process to manage and oversee the assessment and intervention of student needs on every level within each participating school site. The University of New Orleans PAM team has been most directly involved with JPPSS in addressing this goal.

The fourth provision of the CAP as specified in goal 4 pertained to students in JPPSS with emotional or behavioral disorders (EBD). This goal required that alternative methods be developed to handle behavior and discipline concerns of students with EBD and that behavior management methods other than school suspensions and expulsions be used to manage student problem behavior. This goal also focused on how the provisions of student Individual Education Plans (IEPs) were developed and implemented.

The five remaining goals pertained to providing services for students identified as having EBD. These goals were included to increase the quality of related services delivered by qualified service providers, to improve overall accountability measures of tracking services for students with EBD, and to enhance the knowledge base of school personnel and those who work directly with these students. Another CAP goal called for the provision of higher-quality and more programmatic transition services to students with EBD. Finally, the CAP obligated JPPSS to review the access that students with EBD had to the general education setting and provide assurances that these students received special education programming in the Least Restrictive Environment (LRE).

The initial implementation template of the RtI model proposed by the CAP delayed referral to the school-based problem-solving team until the third tier of the three-tiered intervention process was reached. The PAM team revised this proposed rule to include the oversight of students needing intervention at all levels, not just the third or tertiary-level tier. The involvement of the ABIT problem-solving team in the PAM version of the RtI/PBS model was essential at all tiers of the intervention model so that appropriate interventions could be delivered via a seamless continuum of service delivery.

Another key component of the PAM model was the emphasis it placed on the key role of the school-based, problem-solving team (ABIT) within each school. The ABIT is consolidated so

that communications across departments are enhanced and all students are considered in team decision-making processes. The problem-solving team (ABIT) at each school is comprised of members from the school's administration, general education staff, pupil appraisal staff, and representatives from other compensatory programs such as Section 504, and special education.

At the district level, a Consolidated Team consisted of representatives from essential and compensatory district programs including representatives from general education, special education, Positive Behavior Support, Section 504, Technology, Accountability, Safe and Drug Free Schools and consultants from the University of New Orleans. The purpose of creating a consolidated team on the district level and in each school was to foster development of a true seamless model of service delivery across departments, service areas, and educational entities with the entire school system, and eventually the community.

JPPSS is at the time of this writing in the third year of implementing the PAM-RtI/PBS model in its 53 elementary schools and is expanding the model to middle and high schools for the 2008–2009 school year. The universal screening procedures utilized within the PAM model are described below.

#### *Using the Systematic Screening for Behavior Disorders (SSBD) to Identify EBD Students*

**2006–2007 SSBD Screenings.** During the 2006–2007 school year, the SSBD was used to screen general education students respectively in grades 1–5 in all 53 elementary schools within JPPSS. Of the students included in the screenings, 49.3% were African American, 33.7% were Caucasian, and 17.0% were distributed across an Other category. For the first year of screening using the SSBD in JPPSS, the PAM team conducted all screenings in the 53 elementary schools. This team was comprised of Master's and Doctoral-level staff with a primary background or certification as either an Educational Diagnostician or School Psychologist. All screening staff had at least 30 hours of graduate coursework in assessment and diagnostic methods.

In January of 2007, training was conducted with the 53 elementary school Academic and Behavior Intervention Teams (ABITs) regarding the utilization and philosophy behind using the SSBD, the administration of the SSBD, and the scoring and interpretation of data. During the second semester of the 2006–2007 year, SSBD screenings were conducted at each school in either a faculty meeting (typically one to 1½ hours) or in grade-level meetings (i.e., during teacher planning periods). To assist the school system, all gate 1 and gate 2 protocols were collected by UNO personnel. SSBD gate 2 protocols were scored and data were entered into a Microsoft Excel spreadsheet for each school. The Excel spreadsheet for each school included a summary page of all SSBD data for the school, and summaries of at-risk students according to name, teacher, grade and Critical Events Index score. Finally, each spreadsheet included a grade-by-grade roster of all students who were either nominated or considered to be behaviorally "at-risk." Spreadsheets were disseminated to schools by members of the UNO PAM team and results were discussed with school administrators and members of the ABIT.

Of the 22,101 students screened in spring, 2007, a total of 3,488 students were nominated by their teachers (approximately 15.8% of all students screened) for further screening using gate 2 SSBD measures. Across the 53 schools, the percentage of students nominated ranged from 3.7% to 34.3%. Of those students nominated, 1,533 students were determined to be at-risk according to the SSBD criteria and cutoff scores. The percentage of at-risk students ranged from 1.3% to 14.6% of the students screened, which was 6.9% of the total student population. Of the 1,533 identified at-risk students, 71.7% were male and 28.3% were female; 66.6% of the

at-risk students were Externalizers and 33.4% were Internalizers. These statistics are consistent with findings reported by Walker and Severson (1990) for the SSBD standardization data (Walker & Severson, 1990).

*2007–2008 SSBD Screenings.* In the fall of 2007, JPPSS Pupil Appraisal staff members, comprised of Educational Diagnosticians, School Psychologists, and Social Workers, were trained in the SSBD's administration, scoring and data interpretation procedures. For the second year of behavioral screening, Pupil Appraisal staff assisted the UNO PAM team in the administration of the SSBD in the 53 participating elementary schools. To enhance the likelihood that administration procedures would be similar across the school district, each member of the Pupil Appraisal team was given a Coach Card (developed by UNO) that outlined the step-by-step administration of the SSBD. During the 2007–2008 school year, SSBD screenings began in mid-October and data for most schools were collected by the end of November. UNO personnel collected gate 1 and gate 2 protocols and data were entered into spreadsheets as they were during the 2006–2007 school year.

Spreadsheets for the SSBD data collected during the second year of screening were expanded and refined. Specifically, more descriptive and demographic data were provided on the school summary sheet and two additional pages were added to each file. UNO staff developed an SSBD Item Analysis process that provided a frequency count for each item on the Critical Events Index (CEI) of the SSBD according to gender and grade. Each time one of the 33 CEI items was checked by a teacher it was tallied on the Item Analysis sheet. Each tally was placed into a box that specified the grade of the student and whether the behavior was produced by a male or female student and whether he or she was an Externalizer or Internalizer. This process was followed for all protocols received from each school, regardless of whether the student was simply nominated or at-risk.

A similar format was used to analyze scores on the Adaptive and Maladaptive Behavior Scales. The Adaptive Behavior Scale of the SSBD assesses the frequency of behaviors that are considered to be socially desirable and appropriate to the classroom. Each of the 12 items on this scale is assigned a score ranging from 1 to 5, depending on frequency of occurrence. A score of 1 indicates that the student "Never" exhibits the behavior in question and a rating of 5 indicates that the student "Frequently" exhibits the behavior. Students can receive a maximum score of 60 on the Adaptive Behavior Scale, with higher scores indicating that students frequently exhibit socially desirable or appropriate forms of expected classroom behavior.

For the Item Analysis procedure, a tally was kept for an item on the Adaptive Behavior Scale that received either a score of 1 or 2, indicating that a student never or seldom exhibited that desired behavior. Tallies were entered into boxes that specified student grade, gender and whether the student was identified as an Externalizer or Internalizer. On the Maladaptive Behavior Scale, students were rated on 11 items according to the frequency with which they exhibited undesirable behaviors. Student ratings range from 1 to 5, with a score of 1 representing "Never," and 5 representing "Frequently." Students can receive a maximum score of 55 on the Maladaptive scale, with higher scores indicating that students frequently exhibit inappropriate or socially undesirable behaviors. For the Item Analysis, a tally was developed for an item on the Maladaptive Behavior Scale if a student was assigned a score of 3 or higher. Each tally was entered into boxes that again specified student grade, gender and whether he or she was identified as an Externalizer or Internalizer.

As noted, the Item Analysis procedure was developed by the UNO PAM team to assist with the specification of areas of concern identified within each school. Positive Behavior Support teams were able to utilize data from the Item Analysis to more accurately develop school-wide training plans for each participating school. Information from the Item Analyses for the

Adaptive and Maladaptive Behavior scales was also used to guide social skills training in areas needing more intensive attention. By using the Item Analysis, administrators and members of the ABIT and PBS teams were able to obtain information (per teacher report) about specific behaviors and/or areas in their respective schools as well as subgroups of students needing more focused intervention. The Item Analysis for the CEI provided information about the behaviors most frequently reported by teachers to be seriously problematic (e.g., "Ignores teacher warnings"). Further examination of the Item Analysis also provided information about whether intervention should be directed toward a specific grade (e.g., fourth grade), gender, or at-risk subgroup (e.g., Externalizer or Internalizer).

An additional component pertaining to administration of the SSBD in 2007–2008 was the manner in which information from three items on the Critical Events Index was handled. Discussion between UNO personnel and JPPSS administrators led to a determination that items #18, #22 and #24 required mandatory reporting by the school administration and UNO personnel if checked off by a teacher. These items refer to the presence or evidence of a student having suicidal (or death-related) thoughts and the suspicion of a student having been either physically or sexually abused. The district decided that if a protocol was found to have a check by any of the three items, a report was to be made immediately to the school principal.

During the 2007–2008 school year, the SSBD was used to screen 16,634 JPPSS students in grades 1–5. Five sixth-grade classes were also included. Of the total number of students screened, 3,521 (approximately 21% of the screened population) were nominated for gate 2 assessments by general education teachers. Of those students nominated, 1,299 were determined to be behaviorally at-risk based on their SSBD gate 2 profiles. Across the 53 schools, the percentage of students nominated ranged from 5.1% to 33.8% and the percentage of students judged to be at-risk in each school ranged from 2.0% to 21.7%. Overall, 7.8% of all students screened were at-risk as compared to 6.9% of all students in the previous school year. The percentages of males and females identified as at-risk were identical to the percentages identified during the first year of screening (i.e., 71.7% males, 28.3% females). The distribution of Externalizers and Internalizers was also quite similar (i.e., 66.6% Externalizers, 33.4% Internalizers).

### ***Operating Details of the Pupil Assistance Model (PAM) at Tiers I, II, and III***

The PAM applies a comprehensive *Response to Intervention (RtI) and Positive Behavior Support (PBS)* framework with the goal of incorporating research-based assessment tools and evidence-based interventions into a systematic approach that yields positive results for students. PAM is a multi-tiered academic and behavior-focused model in which both assessment and intervention processes increase in intensity and measurement precision at each successive tier. The Pupil Assistance Model includes the following components:

- Tier I: General Education—Universal screening, school and/or class-wide interventions
- Tier II: Standard Protocol—Small group and targeted interventions
- Tier III: Problem-Solving—Individual and more intensive services

The PAM model is based on the best practices of providing high-quality instruction and interventions carefully matched to student need, monitoring progress frequently to make needed changes in instruction, and applying student response data in making important educational decisions. PAM promotes the use of Curriculum-Based Measurement (CBM) for academic universal screening and frequent progress monitoring. The behavioral component of the

model incorporates the use of Office Discipline Referral (ODR) data and the Systematic Screening for Behavior Disorders procedure as measures to align student needs with effective behavioral interventions. The integrated PAM model has produced improved academic and behavioral outcomes for JPPSS students. PAM also encourages evaluating school climate by using a measure such as the Safe School Assessment and Resource Bank (SSARB) as an initial assessment when developing a culture of positive behavioral support. Below is a brief description of the PAM process at Tiers I, II, and III. Central to high-fidelity implementation of the PAM model is the establishment of a school-based problem-solving team that functions to oversee and guide assessment and interventions on each level of the tiered model.

*Tier I: General Education—Universal Screening, School and/or Class-Wide Interventions.* In Tier I, all students are screened in reading, math and behavior to determine who has satisfactory competence levels in specific academic areas and demonstrates expected levels of appropriate behavior. This information provides teachers and administrators with the necessary information to select curricula, design instruction, and implement behavior strategies to prevent school failure. After screening in reading and math, assessments are scored, graphed, and the data are analyzed by grade, class and student. If at least 50% of the students in a classroom are not performing at an appropriate level as determined by normative comparisons, then the possibility of inappropriate instruction, ineffective classroom management, or a potential curriculum change is considered.

If at least 50% of the students have performed at a level consistent with grade-level norms and expectation, yet some students are still performing within the "at-risk" range, those students are further assessed to determine if poor motivation or a lack of skills or both are factors in their performance problems. If either or both are determined to be contributing factors, these students are referred on to Tier II.

In the behavioral area, screening is accomplished by examining Office Discipline Referral (ODR) data and administering the Systematic Screening for Behavior Disorders (SSBD). Office Discipline Referral data are analyzed to identify areas of concern that may impact the entire school, or large numbers of students, such as the time of day of behavioral incidents, location, and type of offense and so forth. If 20% of the student population is "at risk" for a particular offense, or 20% of the students repeatedly get in trouble in a particular setting or time of day, the School-Wide Positive Behavior Support Plan is revised to address these concerns.

Next, the SSBD is administered to all students (with the exception of those already identified as receiving special education) during the fall semester. Any target student meeting gate 2 SSBD exit criteria is then considered for referral to Tier II or possibly Tier III interventions and/or assessments. PAM encourages the use of item analyses on the gate 2 rating scales to determine whether school-wide, grade-level or individual classes need a specific intervention focus.

*Tier II: Standard Protocol—Small Group and Targeted Interventions.* Tier II is designed for small groups and individual students who may need more targeted and intensive intervention. Systematic interventions with standard Coach Cards are generally used at this level. Interventions may include differentiated instruction, a different type of program, or targeted behavior strategies such as Check-In/Check-Out (CICO). Additionally, peer tutoring, peer mentoring, psycho-educational groups and/or a parent training component aspect may be added as intervention support in Tier II.

For academic interventions, aim lines are set using Curriculum-Based Measurement (CBM) procedures. Data are collected daily and examined after every five to seven data points by calculating the level and rate of student progress. Decisions are made based on the students'

success or failure to respond to appropriate interventions that have been implemented with solid treatment fidelity. These decisions may include continuing the intervention, modifying the intervention and/or strategy; moving back to Tier I or intensifying the intervention at a Tier III level.

Behavior interventions follow similar procedures. Goals are set, behavior is monitored carefully using teacher ratings, observations, work completion, attendance, and/or Office Discipline Referral data. Aggregated data are also examined at least every five to seven data points to determine the students' success or failure in responding to interventions that have been implemented with treatment fidelity. The decision options are to continue the intervention, change the intervention and/or strategy, return to Tier I or move the student on to Tier III.

*Tier III: Problem-Solving—Individual and More Intensive Services.* An individualized problem-solving approach is generally used at Tier III for the persistent and atypical problems which are not resolved by the more standard and manualized interventions at Tier II. Generally, these procedures are applied with individual students. The design of Tier III interventions is guided by systematic assessment and review of the problem; hypothesis development is intended to target specific academic and/or behavior skill deficits. Examples of academic interventions may include instructing students on a lower grade level or teaching a prerequisite skill set. Typically, students assigned to Tier III due to behavioral issues will have a functional behavior assessment (FBA) completed to assist in the problem-solving process. The FBA helps identify significant, pupil-specific, social, affective, cognitive and/or environmental factors associated with the occurrence and non-occurrence of specific behaviors. On the Tier III level, data are collected daily and examined every five to seven data points to determine the students' success or failure to respond to the intervention. The resulting decisions may be to continue the intervention, change the intervention and/or strategy, or in rare cases to move a student back to Tier I or Tier II. Students who are not successful at this level may eventually be referred for special education services and may involve tertiary resources such as child mental health and/or other social service agencies.

The Pupil Assistance Model application of RtI and PBS, as described herein, can be conceptualized as a continuum of programs and services for students having moderate to severe academic and behavior difficulties. PAM is an RtI/PBS multi-tiered service delivery system critical to meeting NCLB and IDEA regulations. The continuous monitoring of the adequacy of student responses to well-implemented, universal curriculum and positive behavior support procedures is particularly relevant to the PAM approach as a means of determining whether existing instruction and support are sufficient. The overarching goals of the PAM are: (1) to ensure that quality instruction, good teaching practices, differentiated instruction, remedial opportunities and evidence-based, behavior strategies are available and accessible within general education; and (2) that special education is provided for students with disabilities who require more specialized services than can be provided in a general education context. PAM appears to be a promising model for jointly addressing academic and behavior problem domains within an integrated framework. Future research on its outcomes with at-risk student populations, and their sustainability, will help establish the parameters of its efficacy.

### **Directions for Future Research, Practice and Policy**

The origins of antisocial behavior patterns appear to be in evidence at an increasingly early age and it is known that these behaviors can be prevented from escalating into more serious and

intractable problems (Strain & Timm, 2001). Effective practices for this student population in schools should include universal screening procedures to provide early detection, school-based interventions, training in parenting skills, and teacher in-service training, all of which have been empirically demonstrated to increase prosocial behavior and reduce aggressive behavior problems (Reid, 1993; Walker, Ramsey, & Gresham, 2004). Prevention begins with early detection and as RtI-PBS approaches continue to be adopted by schools, it is imperative that a standard universal screening component be adopted as a continuing part of their routine procedures.

The movement toward using an RtI-PBS approach, as illustrated by the PAM model described above, can address *both* academic and behavior concerns but it needs to begin with increased awareness of the scope and extent of the problem. Teachers, administrators, policy-makers, legislators, staff development specialists, and researchers alike need to become aware of the integral relationships that exist between academic and behavioral performance. Continuing to address them as independent issues can lead to stunted progress for many students and continued frustration for teachers (Dodge, 2008). Along with increased awareness, there needs to be a more robust knowledge base developed to support the potential of the RtI-PBS heuristic to positively influence student performance across these domains and using a school-based, team approach (Albers, Glover, & Kratochwill, 2007; Elliott, Huai, & Roach, 2007). This team should include, at a minimum, general and special education teachers, school psychologists, behavior specialists, reading specialists, and administrators.

In order for RtI to effectively address behavioral and academic domains, currently available technology needs to be improved and expanded. Specifically, a system for integrating academic and behavior data needs to be developed so that it can be aggregated and accessed for rapid, high-quality decision-making. In this regard, the authors of the SSBID procedure are currently in the process of developing a web-based, electronic version of the instrument that will allow for administration, scoring and profiling of student outcomes. Existing software such as Discipline Tracker or SWIS may be able to be modified to integrate academic data. It will also be important to develop behavioral measures that can be given repeatedly and remain sensitive to change over time similar to the DIBELS measures for reading performance (see Gresham, in press). To do so will require the identification of meaningful behavioral benchmarks and normative criteria for grade levels by gender and developmental stages.

We believe the risk factors that result in children coming to school suffering from palpable, environmentally induced damage can be effectively addressed by a coordinated continuum of effective early interventions, including the PAM approach illustrated herein, that address the needs of severely at-risk children from the beginning of their school careers. Compelling longitudinal research by Hawkins et al. (1999) shows that comprehensive early intervention, delivered in the first three grades of school and that involves parents, teachers, peers, and the target child, provides long-term protection against a number of health-risk behaviors at age 18. These risks include **delinquent acts, school failure and dropout, teenage pregnancy, heavy drinking, school behavior problems, and having multiple sex partners**. We cannot afford to ignore the enormous policy implications of these and similar robust findings.

We currently have the knowledge and available expertise to implement these prevention initiatives with good integrity using an RtI-PBS framework. For example, Walker, Seeley, Small, Severson, Graham, Feil, Serna, Golly, and Forness (2009) recently reported results of a four-year, randomized controlled trial that illustrates the combined use of the SSBID screening system with the *First Step to Success* early intervention program which addresses secondary prevention goals in school and home contexts (Walker, Kavanagh, Stiller, Golly, Severson, & Feil, 1998). Prevention initiatives of this type for at-risk students, mounted early in their

school careers, appear to be increasingly in evidence within the educational and psychological literatures. However, as yet, we have not demonstrated the will, on a broad-based scale, to (a) assume ownership of the problems that these prevention efforts are designed to address; (b) invest the resources necessary to support their high quality implementation; and (c) provide the long-term supports that will ensure their maintenance and durability. We are hopeful that the next decade will see positive changes in the policies of schools, mental health systems, social services agencies, and legislative bodies that will allow these important goals to be realized.

## References

- Achenbach, T. M. (1991). *The child behavior checklist: Manual for the teacher's report form*. Burlington, VT: Department of Psychiatry, University of Vermont.
- Albers, C., Glover, T., & Kratochwill, T. (2007). Introduction to the special issue: How can universal screening enhance educational and mental health outcomes? *Journal of School Psychology, 45*(2), 113-116.
- Algozzine, R., Ysseldyke, J., & Christenson, S. (1983). An analysis of the incidence of special class placement: The masses are burgeoning. *Journal of Special Education, 17*(2), 141-147.
- Batsche, G., Elliott, J., Graden, J., Grimes, J., Kovalesski, J., & Prasse, D. (2005). *Response to intervention: Policy considerations and implementation*. Alexandria, VA: National Association of State Directors of Special Education.
- Blechman, E. & Hile, M. (in press). Broadband risk assessment. In E. Blechman, C. Fishman, & D. Fishman (Eds.), *Building a prosocial community: School-based prevention of youth violence, suicide and substance abuse*. Champaign, IL: Research Press.
- Burns, B. & Hoagwood, K. (2002). *Community treatment for youth: Evidence-based interventions for severe emotional and behavioral disorders*. New York: Oxford University Press.
- Caldarella, P., Young, E., Richardson, M., Young, B., & Young, K. R. (2008). Validation of the systematic screening for behavior disorders in middle and junior high school. *Journal of Emotional and Behavioral Disorders, 16*(2), 105-117.
- Diperna, J., Volpe, R., & Elliott, S. (2002). A model of academic enablers and elementary reading/language arts achievement. *School Psychology Review, 31*, 298-312.
- Dodge, K. (2008). Framing public policy and prevention of chronic violence in American youths. *American Psychologist, 63*(7), 573-590.
- Drummond, T. (1993). *The Student Risk Screening Scale (SRSS)*. Grants Pass, OR: Josephine County Mental Health Program.
- Durlak, J. (1997). *Successful prevention programs for children and adolescents*. New York: Plenum.
- Eddy, J. M., Reid, J. B., & Curry, V. (2002). The etiology of youth antisocial behavior, delinquency and violence and a public health approach to prevention. In M. R. Shinn, H. M. Walker, & G. Stoner (Eds.), *Interventions for academic and behavior problems II: Preventive and remedial approaches* (pp. 27-51). Bethesda, MD: National Association for School Psychologists.
- Elliott, S., Huai, N., & Roach, A. (2007). Universal and early screening for educational difficulties: Current and future approaches. *Journal of School Psychology, 45*(2), 137-162.
- Embry, D. (2002). The good behavior game: A best practice candidate as a universal behavioral vaccine. *Clinical Child and Family Psychology Review, 5*, 273-297.
- Fox, L., Dunlap, G., Hemmeter, M. L., Joseph, G. E., & Strain, P. S. (2003). The teaching pyramid: A model for supporting social competence and preventing challenging behavior in young children. *Young Children, 58*(4), 48-52.
- Frey, A., Lingo, A., & Nelson, C. M. (in press). Implementing positive behavior support in elementary schools. In M. Shinn & H. Walker (Eds.), *Interventions for achievement and behavior problems in a three-tier model including Response to Intervention*. Bethesda, MD: National Association of School Psychologists.

- Geisiner, K. F., Spies, R. A., Carlson, J. F., & Plake, B. S. (2007). *The Seventeenth Mental Measurements Yearbook*. Lincoln, NE: Buros Institute of Mental Measurements.
- Glover, T., Diperna, J., & Vaughn, S. (2007). Introduction to the special series on service delivery systems for response to intervention: Considerations for research and practice. *School Psychology Review*, 36(4), 523-525.
- Greenwood, C., Walker, H. M., Todd, N., & Hops, H. (1979). Selecting a cost-effective device for the assessment of social withdrawal. *Journal of Applied Behavior Analysis*, 12, 639-652.
- Gresham, F. M. (2004). Current status and future directions of school-based behavioral interventions. *School Psychology Review*, 33, 326-343.
- Gresham, F. M. (in press). Evidence-based social skills interventions: Empirical foundations for instructional approaches. In M. Shinn & H. Walker (Eds.), *Interventions for achievement and behavior in a three-tier model including Response to Intervention*. Bethesda, MD: National Association of School Psychologists.
- Gresham, F. M. & Elliott, S. (1990). *The social skills rating system (SSRS)*. Bloomington, MN: Pearson Assessments.
- Gresham, F. M., MacMillan, D., & Bocian, K. (1996). "Behavioral earthquakes": Low frequency, salient behavioral events that differentiate students at-risk for behavioral disorders. *Behavioral Disorders*, 21(4), 277-292.
- Hawkins, J. D., Catalano, R. F., Kosterman, R., Abbott, R., & Hill, K. G. (1999). Preventing adolescent health-risk behaviors by strengthening protection during childhood. *Archives of Pediatrics & Adolescent Medicine*, 153, 226-234.
- Hunter, L., Hoagwood, K., Evans, S., Weist, M., Smith, C., Paternite, C., Horner, R., Osher, D., Jensen, P., & the School Mental Health Alliance (2005). *Working together to promote academic performance, social and emotional learning, and mental health for all children*. New York: Center for the Advancement of Children's Mental Health at Columbia University.
- Irvin, L., Tobin, T., Sprague, J., Sugai, G., & Vincent, C. (2004). Validity of office discipline referral measures as indices of school-wide behavioral status and effects of school-wide behavioral interventions. *Journal of Positive Behavior Interventions*, 6(2), 131-147.
- Kauffman, J. (1999). How we prevent the prevention of emotional and behavioral disorders. *Exceptional Children*, 65(4), 448-468.
- Kauffman, J. (2005). How we prevent the prevention of emotional and behavioral difficulties in education. In P. Clough, P. Garner, J. T. Pardeck, F. K. O. Yuen (Eds.), *Handbook of emotional and behavioral difficulties in education* (pp. 429-440). London: Sage.
- Kauffman, J. & Landrum, T. (2008). *Characteristics of children's behavior disorders (8th ed.)*. Columbus, OH: Charles Merrill.
- Kazdin, A. (1987). *Conduct disorders in childhood and adolescence*. London: Sage.
- Lane, K. (2007). Identifying and supporting students at risk for emotional and behavioral disorders within multi-level models: Data-driven approaches to conducting secondary interventions with an academic emphasis. *Educational and Treatment of Children*, 30, 135-164.
- Lane, K., Kalberg, J., Parks, R., & Carter, E. (2008). Student risk screening scale: Initial evidence for score reliability and validity at the high school level. *Journal of Emotional and Behavioral Disorders*, 16(3), 178-190.
- Leff, S. & Lakin, R. (2005). Playground-based observation systems: A review and implications for practitioners and researchers. *School Psychology Review*, 34(4), 475-489.
- Levitt, J., Saka, N., Romanelli, L., & Hoagwood, K. (2007). Early identification of mental health problems in schools: The status of instrumentation. *Journal of School Psychology*, 45(2), 163-192.
- Lloyd, J. W., Kauffman, J. M., Landrum, T. J., & Roe, D. L. (1991). Why do teachers refer pupils for special education? An analysis of referral records. *Exceptionality*, 2(3), 115-126.
- Loeber, R., Dishion, T. J., & Patterson, G. R. (1984). Multiple gating: A multi-stage assessment procedure for identifying youths at risk for delinquency. *Journal of Research in Crime and Delinquency*, 21(1), 7-32.

- Loeber, R., & Farrington, D. P. (Eds.). (1998). *Serious and violent juvenile offenders: Risk factors and successful interventions*. Thousand Oaks, CA: Sage Publications.
- Louisiana Department of Education (2005). *State special education data profile—2005*. Baton Rouge, LA.
- Louisiana Department of Education (2008). *District composite report—Jefferson Parish*. Baton Rouge, LA.
- May, S., Ard, W., Todd, A., Horner, R., Glasgow, A., & Sugai, G. (2001). *School-wide information system*. Eugene, OR: University of Oregon, Educational and Community Supports
- Merrell, K. W. (1999). *Behavioral, social, and emotional assessment of children & adolescents*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Merrell, K. W. (2001). Assessment of children's social skills: Recent developments, best practices, and new directions. *Exceptionality*, 9(1 & 2), 3–18.
- NASP Position Statement on Early Childhood Care and Education (2002). [http://www.naspoline.org/about\\_nasp/pospater\\_earlychild.aspx](http://www.naspoline.org/about_nasp/pospater_earlychild.aspx). Bethesda, MD: National Association of School Psychologists.
- Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). *Antisocial boys*. Eugene, OR: Castalia.
- Reid, J. B. (1993). Prevention of conduct disorder before and after school entry: Relating interventions to developmental findings. *Development & Psychopathology*, 5, 311–319.
- Ross, A. (1980). *Psychological disorders of children: A behavioral approach to theory, research and therapy* (2nd ed.). New York: McGraw-Hill.
- Severson, H., Walker, H. M., Hope-Doolittle, J., Kratochwill, T., & Gresham, F. M. (2007). Proactive, early screening to detect behaviorally at-risk students: Issues, approaches, emerging innovations, and professional practices. *Journal of School Psychology*, 45(2), 193–224.
- Shinn, M. (2007). Identifying students at risk, monitoring performance, and determining eligibility within response to intervention: Research on educational need and benefit from academic intervention. *School Psychology Review*, 36(4), 601–617.
- Sprague, J. & Walker, H. M. (in press). Building safe and healthy schools to promote school success: Critical issues, current challenges, and promising practices. In M. Shinn & H. Walker (Eds.), *Interventions for achievement and behavior problems in a three-tier model including Response to Intervention*. Bethesda, MD: National Association of School Psychologists.
- Strain, P. S., & Timm, M. A. (2001). Remediation and prevention of aggression: An evaluation of the Regional Intervention Program over a quarter century. *Behavioral Disorders*, 26(4), 297–313.
- Sugai, G. & Horner, R. (2002). The evolution of discipline practices: School-wide positive behavior supports. *Child and Family Therapy*, 24(1/2), 23–50.
- Sugai, G., Sprague, J., Horner, R., & Walker, H. (2000). Preventing school violence: The use of office discipline referrals to assess and monitor school-wide discipline interventions. *Journal of Emotional and Behavioral Disorders*, 8, 94–101.
- Tobin, T. & Sugai, G. (1999). Using sixth-grade school records to predict violence, chronic discipline problems, and high school outcomes. *Journal of Emotional and Behavioral Disorders*, 7, 40–53.
- Todis, B., Severson, H., & Walker, H. M. (1990). The critical events scale: Behavioral profiles of students with externalizing and internalizing behavior disorders. *Behavioral Disorders*, 15(2), 75–86.
- Walker, B., Cheney, D., Stage, S., Blum, C., & Horner, R. (2005). School-wide screening and positive behavior supports: Identifying and supporting students at risk for school failure. *Journal of Emotional and Behavioral Disorders*, 7, 194–204.
- Walker, H. M., Block-Pedego, A., Todis, B., & Severson, H. (1991). *School archival records search (SARS): User's guide and technical manual*. Longmont, CO: Sopris West.
- Walker, H. M., Colvin, G., & Ramsey, E. (1995). *Antisocial behavior in schools: Strategies and best practices*. Pacific Grove, CA: Brooks/Cole.
- Walker, H. M., Horner, R. H., Sugai, G., Bullis, M., Sprague, J. R., Bricker, D., & Kaufman, M. J. (1996). Integrated approaches to preventing antisocial behavior patterns among school-age children and youth. *Journal of Emotional and Behavioral Disorders*, 4, 194–209.
- Walker, H. M., Kavanagh, K., Stiller, B., Golly, A., Severson, S., & Feil, E. (1998). First step to success: An early intervention approach for preventing school antisocial behavior. *Journal of Emotional and Behavioral Disorders*, 6(2), 66–80.

- Walker, H. M., Nishioka, V. M., Zeller, R., Severson, H. H., & Feil, E. G. (2000). Causal factors and potential solutions for the persistent under-identification of students having emotional or behavioral disorders in the context of schooling. *Assessment for Effective Intervention, 26*(1), 29-40.
- Walker, H. M., Ramsey, E., & Gresham, F. M. (2004). *Antisocial behavior in school: Evidence-based practices* (2nd ed.). Belmont, CA: Wadsworth/Thomson Learning.
- Walker, H. M., Seeley, J., Small, J., Severson, H., Graham, B., Feil, E., Serna, L., Golly, A., & Forness, S. R. (2009). A randomized controlled trial of the First Step to Success early intervention: Demonstration of program efficacy outcomes in a diverse, urban school district. *Journal of Emotional and Behavioral Disorders, 17*(4), 197-212.
- Walker, H. M., & Severson, H. H. (1990). *Systematic Screening for Behavior Disorders (SSBD): User's guide and technical manual*. Longmont, CO: Sopris West.
- Walker, H. M., Severson, H., Nicholson, F., Kehle, T., Jenson, W., & Clark, E. (1994). Replication of the Systematic Screening for Behavior Disorders (SSBD) procedure for the identification of at-risk children. *Journal of Emotional and Behavioral Disorders, 2*(2), 66-77.
- Walker, H. M., Severson, H., & Seeley, J. (in press). Universal, school-based screening for the early detection of behavioral problems contributing to later destructive outcomes. In M. Shinn & H. Walker (Eds.), *Interventions for achievement and behavior problems in a three-tier model including Response to Intervention*. Bethesda, MD: National Association of School Psychologists.
- Walker, H. M., Severson, H., Stiller, B., Williams, G., Haring, N., Shinn, M., & Todis, B. (1988). Systematic screening of pupils in the elementary age range at risk for behavior disorders: Development and trial testing of a multiple gating model. *Remedial and Special Education, 9*(3), 8-14.
- Walker, H. M., Severson, H. H., Todis, B. J., Block-Pedego, A. E., Williams, G. J., Haring, N. G., & Barckley, M. (1990). Systematic screening for behavior disorders (SSBD): Further validation, replication and normative data. *Remedial and Special Education, 11*(2), 32-46.
- Walker, H. M., Stieber, S., Ramsey, E., & O'Neill, R. (1993). Fifth grade school adjustment and later arrest rate: A longitudinal study of middle school antisocial boys. *Journal of Child and Family Studies, 2*(4), 295-315.
- Weissberg, R. (2005, August). *Social and emotional learning for life success*. Paper presented at the annual meeting of the American Psychological Association, Washington, DC.
- Ysseldyke, J., Vanderwood, M., & Shriner, J. (1997). Changes over the past decade in special education referral to placement probability: An incredibly reliable practice. *Diagnostic, 23*(1), 193-201.
- Zigler, E., Taussig, C., & Black, K. (1992). Early childhood intervention: A promising preventative for juvenile delinquency. *American Psychologist, 47*, 997-1006.