

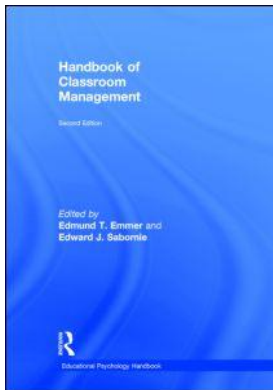
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### **School-Wide Positive Behavior Support**

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# 3

## SCHOOL-WIDE POSITIVE BEHAVIOR SUPPORT

### *Building Systems to Prevent Problem Behavior and Develop and Maintain Appropriate Social Behavior*

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## INTRODUCTION

School discipline continues to be reported as one of the top concerns of educators and the American public (Elam, Rose, & Gallup, 1996; Rose & Gallup, 2006; U.S. Department of Education, 1998). For example, Myers and Holland (2000) indicated that general education teachers reported on average that one in five of their students exhibited disruptive/off-task behavior and one in 20 exhibited aggressive behaviors to the point that intervention was necessary. Data suggest that students in middle and high schools are even more at risk for encountering serious violence (Heavyside, Rowand, Williams, & Farris, 1998), with an estimated 16% of all high school students in this country involved in one or more physical fights on school property in the course of a year (Lockwood, 1997). Although the majority of students will not experience exceedingly violent or aggressive behavior, the frequency and intensity of these behaviors still disrupt and can overwhelm the process of schooling for all students (Walker, Ramsey, & Gresham, 2004). Teachers and administrators indicate that addressing school discipline issues is one of the single greatest demands on their time, citing that problem behaviors interfere with the their ability to educate and are

the most common reason for the removal of students from classroom and school settings (Miller-Richter, Lewis, & Hagar, 2012).

Further compounding the challenge that schools face is the relationship between low-level nonviolent behavioral offenses (noncompliance, disrespect, insubordination) and later emergence of more serious or violent offenses (Heaviside, Rowand, Williams, & Farris, 1998; Powell, Fixsen, Dunlap, Smith, & Fox, 2007). In one study, 52% of the teachers and administrators who were surveyed reported an increase in violence at the middle and high school levels; however, they perceived that minor offenses such as verbal intimidation, threats, shoving, and harassment were escalating at a far greater rate than more serious violations (Peterson, Beekley, Speaker, & Pietrzak, 1996). Suspensions and expulsions have increased due in large part to such minor infractions as noncompliance, tardiness, and truancy (Brooks, Schiraldi, & Ziedenberg, 1999; Ingersoll, & LeBoeuf, 1997; Skiba, Peterson & Williams, 1997). Mayer and Leone (1999) point out that school personnel spend more time and resources on punitive and reactive measures (e.g., security guards, metal detectors, video surveillance systems) aimed at inhibiting aggression and violence than on positive, preventive measures. These findings are significant in that they suggest that schools should spend equal energy on addressing the overall school climate and focusing efforts to reduce minor disruptions. The magnitude of concern regarding the discipline and the mental health needs of children and youth prompted the Surgeon General more than a decade ago to call for a national agenda that fosters social and emotional health in children as a national priority (U.S. Department of Health and Human Services, 2000). To more fully respond to the issue of creating improved school environments to curb disruptive, aggressive, and violent behavior in schools, informed policy and interventions are urgently needed.

### *Factors That Contribute to the Problem*

The Institute on Violence and Destructive Behavior has identified several risk factors that lead to the development of problem behavior patterns among children (Walker, Ramsey, & Gresham, 2004). The list includes (1) poverty, neglect, and abuse, (2) harsh and inconsistent parenting, (3) drug and alcohol use by the caregiver, (4) modeling of aggressive behavior, (5) media violence, (6) a negative attitude in the home toward schooling, (7) family transitions such as death or divorce, and (8) parent criminality. Sadly, contextual factors found in schools also contribute to the development and occurrence of persistent problem behaviors. Mayer (1995, 2001) identified within-school factors that exacerbate antisocial behavior, including: (1) an overreliance on punitive methods of control, (2) unclear rules for student behavior, (3) lack of administrative support for staff and lack of staff agreement with policies, (4) misuse of behavior management procedures, (5) failure to respond to individual student differences, and (6) academic failure. The significance of school-related contextual factors is emphasized in a U.S. Department of Education publication (2000a, p. 10) that states: “Studies indicate that approximately four of every five disruptive students can be traced to some dysfunction in the way schools are organized, staff members are trained, or schools are run.”

At the school and district level, discipline codes and policies are likely to include “get tough” responses (e.g., containment, punishment, suspension, or zero tolerance) designed to send a strong message that certain types of problem behaviors are unacceptable and will result in stringent consequences. Although these responses may lead to temporary reductions in problem behavior, they have little effect on increasing school safety or on the long-term reduction of problem behavior (DeVoe et al., 2003; Skiba, 2002; Skiba, Reynolds, Graham, Sheras, Conoley, & Garcia-Vazquez, 2006). Exclusionary responses increase the probability of future grade retention, subsequent suspensions, expulsion, and dropping out, factors associated with increased academic risk and juvenile crime (Sulzer-Azaroff & Mayer, 1994). Nor do such policies meet the challenge of creating a positive school climate or prevent the development and occurrence of problem behavior (Mayer, 1995; Patterson, Reid, & Dishion, 1992).

### *A Promising Solution*

Altering contextual factors (e.g., clear routines, high rates of positive vs. negative feedback, clear adult presence) has also been associated with the creation of more positive school environments that are conducive to learning and result in increases in student time on task, teacher use of praise, and improved perceptions of school safety (Mayer, Mitchell, Clementi, Clement-Robertson, Myatt, & Vullara, 1993; Metzler, Biglan, Rusby, & Sprague, 2001; Walker, Ramsey, & Gresham, 2004). Consistent with this body of research, the Center on Crime, Communities, and Culture (1997) summarized findings indicating that a quality education may be the most important protective factor available to counter the risk factors that lead to problem behavior. To this end, there is a growing expectation that schools deliver effective and efficient interventions to ensure safe, productive school environments where norm-violating behavior is minimized and prosocial behavior is promoted (U.S. Department of Education, 2000a). A promising solution is the use of proactive school-wide behavior management strategies to address the contextual factors within schools that lead to problem behavior (Horner & Sugai, 2005; Lewis, Jones, Horner, & Sugai, 2010; Sugai et al., 2000). School-Wide Positive Behavior Support (SW-PBS) is one way to effectively (1) reduce chronic challenging behavior, (2) promote cultures of social competence that foster prosocial behavior and academic achievement, and (3) meet the needs of children with significant behavioral challenges (Lewis & Sugai, 1999; Sugai et al., 2000).

### *What Is Positive Behavior Support?*

“Positive behavior support” is a general term that refers to the culturally appropriate application of positive behavioral interventions and systems to achieve socially important behavior change (U.S. Department of Education, 2000b). School-wide PBS focuses on three key elements: (1) adoption of evidence-based practices, (2) data to identify current status and effectiveness of intervention, and (3) systems that enable staff to implement and sustain practices with accuracy.

SW-PBS establishes behavioral expectations and supports for all staff and students across multiple settings and applies a three-tiered approach to prevention (Horner & Sugai, 2005; Lewis, Jones, Horner, & Sugai, 2010; Lewis & Sugai, 1999; Walker et al., 1996). *Universal, or Tier I, supports* focus on preventing the development and occurrence of problem behaviors. *Small group/targeted, or Tier II,* focuses on providing efficient and rapid response to reduce the number of existing cases. *Intensive/individualized, or Tier III,* focuses on reducing the intensity and complexity of existing cases that are not responsive to universal, or Tier II, supports. A functional perspective in which factors that reinforce appropriate behaviors and maintain problem behaviors (i.e., positive and negative reinforcement) guides the development of effective, efficient, and relevant interventions and is applied across the full continuum of supports. Finally, SW-PBS promotes an instructional emphasis in which behavioral expectations are clearly defined and taught to all students. For students who are at risk of social failure, social skills are taught in the same way as academic skills, and behavioral deficits are addressed by teaching functional replacement behaviors (Sugai et al., 2010). The remainder of this chapter provides an overview of the essential features of school-wide systems of PBS and is organized around (1) the essential features of school-wide systems of PBS, (2) current research, and (3) implications for research and practice.

## SCHOOL-WIDE POSITIVE BEHAVIOR SUPPORT

Problem behavior occurs on a continuum from occasional mild misbehavior to behavior that is severe, chronic, and disruptive to the learning environment. SW-PBS emphasizes a continuum of support in which the intensity of intervention increases to match the intensity and complexity of the presenting problem.

### *Universal Supports*

Universal systems of support focus on prevention and the creation of a safe, predictable environment with a common set of expectations and consistent supports applied across three interrelated systems: school-wide, nonclassroom, and classroom.

### *School-Wide Systems*

A leadership team is established to guide all processes of SW-PBS. The team is comprised of a building administrator, classroom teachers, specialists, and support staff representatives. The leadership team takes responsibility for assessment of current discipline procedures and staff perceptions of what is in place, as well as what is working and not working. The information is used by the team to develop and implement SW-PBS policy and procedures. Components of proactive systems of school-wide PBS include (1) a statement of purpose, (2) a clear definition of expected behaviors, (3) procedures for teaching expected behaviors, (4) procedures for discouraging problem behaviors, and (5) procedures for record keeping and decision making (Sugai et al., 2010).

A statement of purpose is used to capture the proactive objectives of the discipline plan. The statement reflects an approach that is agreed upon by the administration and staff, focuses on all members of the school community and emphasizes behavioral as well as instructional outcomes. A key component of SW-PBS is a clear understanding of expected student behavior. To guide the identification of universal expectations, the team focuses not on the problem behaviors but on prosocial “replacement behaviors.” In other words, they emphasize the behaviors that they would like children to demonstrate. The expectations, or school rules, should be five or fewer and positively stated. For example, the staff at Elysium Elementary School wanted their students to be “safe,” “respectful” “learners.” With input from faculty and staff, the leadership team completed a matrix that operationally defined what each of those expectations would look like across all settings in their school. The examples of appropriate behavior were then used as a foundation for social skill instruction.

Behavior is a skill, just as reading and mathematical computations are skills. As such, behavioral skills are taught paralleling the same process as academic instruction; educators introduce and teach a concept (e.g., quadratic equations in algebra), provide practice opportunities (e.g., homework, in-class work), and give feedback on performance (e.g., grades). Only after the student demonstrates mastery does the instructor move on to new concepts. If a student does not master the skill, reteaching, additional support, and practice are provided. Behavioral skills are taught and learned in the same way.

The leadership team also develops procedures to acknowledge appropriate behaviors on a regular basis. This serves three purposes. First, principles of reinforcement teach us that the provision of positive consequences following a desired behavior results in an increase in the future probability of that behavior occurring. Second, procedures to acknowledge appropriate behavior serve to increase the ratio of positive interactions between teachers and students, creating a positive school environment. Third, acknowledgment and reinforcement encourage students to self-manage their own behavior. Schools use a range of reinforcement strategies, from token systems to positive social acknowledgment. The form of the reinforcer is less critical than the related frequency and consistency of acknowledgment of appropriate behavior by teachers and staff.

Even with the school-wide positive procedures in place, there is still a need to develop procedures to discourage problem behaviors. A continuum of consequence responses should be available to respond to problem behavior. Consistency can be increased by providing clear definitions of problem behaviors and by differentiating between the behaviors that should be managed by teachers and supervisory staff and the behaviors that warrant a referral for administrative involvement. A full range of response procedures allows for more effective interventions across the continuum of mild misbehavior to serious and chronic behavior challenges. Students who repeatedly fail to meet behavioral expectations require a different level of response than students who only occasionally misbehave. For these students, systems that focus on teaching and supporting appropriate replacement behaviors come into play.

The use of data to assess current conditions, to guide implementation, and to evaluate the effectiveness of procedures is a critical feature of SW-PBS. An efficient system of data collection and reporting is used to summarize data in a usable format (e.g., graphs that allow visual analysis) for the purpose of evaluation and informed decision making. The data should be flexible enough to provide a summary of key indicators of problem behavior such as (1) number of office referrals per day for any given month, (2) number of office referrals per behavior (e.g., disrespect, fighting, inappropriate language), (3) number of office referrals per location (e.g., cafeteria, classroom, playground), (4) number of office referrals by consequences (e.g., detention, suspension) and (5) cumulative number of office referrals per individual students. The leadership team analyzes the data regularly to discern patterns of problem behavior and to guide the decision-making process. Data decision rules are also established to determine when individual students may need more intensive supports.

### *Nonclassroom Systems*

Nonclassroom settings include areas of the school that are characterized by large numbers of students, strong social interaction among students, minimal adult supervision, and low structure (e.g., cafeteria, hallway transitions, bathrooms, assemblies) and that present a different set of management challenges than the classroom does. The school-wide expectations are extended to address specific behaviors unique to these settings through direct instruction and opportunities to practice. In addition, the physical characteristics and routines of these settings are assessed to determine whether modifications are necessary to promote safety and effective supervision. Modifications may include physical adjustments, such as removing unsafe objects, eliminating objects or areas with obstructed views, altering traffic patterns or adjusting schedules to reduce the number of students in a particular setting. Setting routines are designed to address both student and adult behavior in order to promote efficiency in the execution of activities and to reduce the likelihood of problem behaviors occurring.

Two strategies, precorrection and active supervision, are important features of nonclassroom setting supports. *Precorrection* procedures are used to make adjustments before a student has a chance to behave inappropriately and are used when a teacher anticipates the occurrence of problem behavior. For example, a teacher may anticipate students having difficulty with an assignment. Based on the predictable errors, she will preteach difficult vocabulary words before students are asked to read a passage (Kameñui & Simmons, 1990). The same strategy is applied to behavioral errors. The teacher provides a precorrect, based on predictable problem behavior, to remind students of the routines and expectations before they transition to a nonclassroom setting. Precorrects consist of identifying the context and the likely problem behavior, identifying the expected behavior, conducting behavioral rehearsals, and providing reinforcement for expected behaviors. Effective use of precorrects can prevent the need to respond reactively to inappropriate student behavior after the fact (Colvin, Sugai, & Patching, 1993).

A second strategy for nonclassroom settings is *active supervision*. Elements of active supervision include (1) movement around the setting in close proximity to students, (2) visual scanning, and (3) high rates of interaction with students comprised of prompts, feedback, praise, correction, and encouragement (Newcomer, Colvin, & Lewis, 2009). After students are instructed in the expectations, rules, and routines, active supervision can promote generalized responding to other settings in the school environment.

### *Classroom Systems*

Paralleling universal school-wide systems, classroom systems also emphasize teaching clearly defined behavioral expectations to prevent the occurrence of problem behavior. Key components of universal classroom systems include (1) identification and instruction in rules and routines, (2) effective instructional strategies, and (3) a strong emphasis on positive teacher–student interactions.

Classroom rules and expectations should reflect the unique characteristics of an individual classroom but link back to and reflect the greater school-wide expectations. Linking the rules to the school-wide expectations extends the language into the classroom and supports the generalization of behavioral performance across settings. For example, if the school-wide expectations are “Be Respectful, Be Responsible, Be Cooperative,” each classroom teacher should align his or her classroom rules with these three expectations. By linking back to the language of the school-wide expectations, the students learn the specific behaviors that are important in the classroom and become able to relate how those expectations fit into the school context as a whole.

Because instruction that is too difficult or too easy creates conditions that foster problem behavior (Cooper et al., 1992), teaching and management strategies that focus on instructional, curricular, and organizational adjustments are linked to improved behavior (Conroy, Sutherland, Snyder, & Marsh, 2006; Simonson, Fairbanks, Briesch, Myers, & Sugai, 2008; Simonson, Myers, & DeLuca, 2010). Students learn best when there are frequent opportunities to respond to and actively engage in the instruction and to be positively reinforced. Frequent opportunities to respond and high rates of correct response are associated with increased on-task behavior (Burns & Boice, 2009; Haydon et al., 2010) and a decrease in disruptive behavior (Christle & Schuster, 2003; Gunter & Reed, 1997). High rates of student response results in increased opportunity for a teacher to praise and correct student responses and allows assessment of student understanding. Effective, well designed instruction incorporates student supportive strategies to minimize errors, support skill acquisition, and encourage active participation by creating opportunities for successful learning.

The quality of teacher–student interactions is another component of SW-PBS in classrooms. Research has demonstrated that in most classrooms, the rate of reprimands exceeds the rate of positive feedback and praise (Sutherland, Lewis-Palmer, Stichter, & Morgan, 2008; Sutherland & Wehby, 2001; Sutherland, Wehby, & Copeland, 2000). Altering interaction patterns to increase teacher praise and positive



attention in the classroom can result in an increase in appropriate behaviors and a decrease in disruptive behaviors. An effective classroom teacher strives for a ratio of four positive praise statements to every reprimand or correction.

### *Tier II Supports*

Approximately 10–15% of students will require support beyond the universal level (Sugai et al., 2010). While these students exhibit problem behaviors at degrees and frequencies that place them at risk for establishing chronic problem behavioral patterns, developing individualized interventions is beyond the time and resources of most schools. As part of the three-tiered approach to prevention outlined earlier in this chapter, Tier II systems of prevention and intervention present an efficient and effective intermediate level of intervention to target students who are clearly linked to universal supports. Students who require this level of intervention typically have a profile of ongoing, low-level problem behaviors (e.g., talking out, minor disruptions, work completion), frequent (three to five) office referrals, and they exhibit problem behavior across multiple settings within the school (Sugai et al., 2010).

Tier II supports focus on a range of intervention procedures and are developed and driven by data indicators. Tier II interventions have included (1) self-management, (2) social skill instruction, (3) informal, brief functional assessments and behavior support plans, and (4) academic support (Mitchell, Stormont, & Gage, 2011). Key features of Tier II supports include continuous availability, rapid access to the intervention, and low effort by teachers for referral and implementation. In addition, they are implemented by all staff across multiple settings and are continuously monitored for effectiveness and decision making. Because Tier II strategies are implemented within the universal school-wide system, they are designed to support the existing classroom expectations and create a common focus and expected outcomes that are consistent throughout the setting (Mitchell, Stormont, & Gage, 2011).

As with universal supports, data-based decision making guides the Tier II process. Students are identified at the first signs of risk, based on data or teacher referral. A multiple gating approach efficiently identifies students who need additional academic and social supports (Lane et al., 2012). First, teachers identify students who may be at risk and make referrals based on their assessments. Second, review of archival data such as attendance, academic performance, and office referrals are used to identify patterns or problems that require support. Third, a team reviews the information to determine which Tier II is appropriate for the student. Daily performance data are used to monitor student progress.

### *Tier III Supports*

With universal and Tier II systems firmly in place, schools should experience a decrease in the number of students who need intensive individual supports (Lewis, Jones, Horner, & Sugai, 2010). With the number of referrals for individual interventions reduced, the system can respond more efficiently and effectively to those students who do require a more intense level of support (Bradshaw, Koth, Thornton, & Leaf, 2009). However, even with effective implementation of SW-PBS at the universal and Tier II

levels, approximately 5–10% of students in a school will require intense, individualized interventions (Sugai et al., 2010). These students typically display serious, chronic behavior patterns and higher rates of behavior infractions (e.g., six or more major behavioral infractions or displaying high rates of risk) and require specially designed individualized supports that are comprehensive, function based, and person centered. Efficient and effective systems of individual support are based on technical competence in functional behavioral assessment and intervention design from an applied behavior analysis perspective. Within the three-tiered approach to SW-PBS, the Tier III level provides systems to build the capacity for schools to understand and assess the function of behavior and to design, implement, evaluate, and modify effective behavior support plans for individuals with serious behavior problems.

A team-based approach is the foundation of a sustainable system of individual behavior support (Benazzi, Horner, & Good, 2006). Team members should possess the technical expertise to conduct functional behavioral assessments (FBA) and to design behavior support plans that are based on assessment outcomes. At least one member of the team should have expertise in applied behavior analysis, behavioral theory, FBA, and intervention. Other logical team members would include school psychologists, special and general educators, and a building administrator. The team must also have predictable and efficient procedures to “(a) manage teacher requests for assistance, (b) ensure that teachers and students receive support in a timely and meaningful manner, (c) provide a general forum for discussions and possible solutions for individual student behavioral concerns, and (d) organize a collaborative effort to support the teacher” (Todd, Horner, Sugai, & Colvin, 1997, p. 74). The organizational features of the team promote the efficient use of time, efficient documentation, a system of accountability for task, and implementation responsibilities and clearly defined systems for making data-based decisions (Benazzi, Horner, & Good, 2006).

### *Summary*

SW-PBS builds a continuum of research-based strategies with a central focus on increasing appropriate behavior. School-wide systems provide the processes, structures, and routines to prevent problem behavior; they promote early intervention at the first signs of problem behavior; and they utilize comprehensive individual support plans. An instructional approach built on a central theme of teaching appropriate behavior, building multiple opportunities for practice, and altering environments to promote success is emphasized through a continuum of three levels of support: universal, targeted, and individual.

## **RESEARCH TO DATE ON THE EFFICACY OF SCHOOL-WIDE POSITIVE BEHAVIOR SUPPORT**

An emerging body of research has shown that implementing a continuum of tiered supports—(1) universals, (2) targeted/small group/Tier II, and (3) individual/Tier III student support—will impact overall rates of problem behavior in school. In addition, preliminary research has demonstrated improvements in behavior,

academic gains, and increases in instructional time following implementation of interventions as part of a fully integrated approach across a continuum of supports. Research to date on the efficacy of each of the three levels is provided in this section.

### *Universal Supports*

Over the past decade, a growing body of research has demonstrated a multi-impact on student social and academic behavior. Quasi experimental studies have demonstrated impact on overall rates of problem behavior from preschool to high school, including alternative settings (Barrett, Bradshaw, & Lewis-Palmer, 2008; Bohanon et al., 2006; Chapman & Hofweber, 2000; Curtis, Van Horne, Robertson, & Karvonen, 2010; Duda, Dunlap, Fox, Lentini, & Clarke, 2004; Farkas, Simonson, Migdole, Donovan, Clemens, Cicchese, 2012; Lohrmann-O'Rourke, Knoster, Sabatine, Smith, Horvath, & Llewellyn, 2000; Nelson, Martella, & Galand, 1998; Putnam, Luiselli, & Sunderland, 2002; Simonson, Britton, & Young, 2010); the interactive impact on behavior and academics (Algozzine, Wang, & Violette, 2011; Luiselli, Putnam, Handler, & Feinberg, 2005; McIntosh, Chard, Boland, & Horner, 2006; McIntosh, Horner, Chard, Dickey, & Braun, 2008; McIntosh, Flannery, Sugai, Braun, & Cochrane, 2008; McIntosh, Sadler, & Brown, 2012); as well as impact on interventions targeted in the classroom and nonclassroom settings within the continuum of SW-PBS (De Pry & Sugai, 2002; Hirsch, Lewis-Palmer, Sugai, & Schnacker, 2004; Lewis, Colvin, & Sugai, 2000; Lewis, Powers, Kelk, & Newcomer, 2002; Putnam, Handler, Ramirez-Platt, & Luiselli, 2003; Stichter, Lewis, Richter, & Johnson, 2006). Recently, several randomized control trial studies have confirmed similar outcomes including proactive and sustained changes in disciplinary practices that have resulted in decreases in problem behavior and increases in appropriate behavior (Bradshaw, Mitchell, & Leaf, 2010; Bradshaw, Reinke, Brown, Bevans, & Leaf, 2008; Horner, Sugai, Smolkowski, Eber, Nakasato, Todd, & Esperanza, 2009), as well as the impact on overall school climate (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008; Bradshaw, Koth, Thornton, & Leaf, 2009) and the reduction of specific behavioral challenges including bullying behavior (Bradshaw, Waasdorp, & Leaf, in press; Waasdorp, Bradshaw, & Leaf, 2012).

### *Tier II Supports*

For an estimated 10–15% of students who require more intensive supports in addition to the universal school-wide PBS system, several different “manualized” interventions are commonly implemented. Example Tier II interventions include check-in/check-out, social skills groups, and Check & Connect (Horner, Sugai, & Anderson, 2010). Each of these interventions has a body of evidence indicating positive effects on socially important behavior change such as reductions in problem behavior, improved social skills, increases in attendance, reduced incidence of drop-out, or higher rates of student engagement. A brief description of current research for each intervention follows.

*Check-in/Check-out*

Check-in/check-out (CICO) is a proactive, positive, research-supported self-management intervention that combines a number of individually effective components to be used with students identified at risk for behavioral concerns (Crone, Hawken, & Horner, 2010). Numerous investigations show that the use of the CICO intervention is associated with reductions in problem behavior and/or increases in prosocial behavior (Filter et al., 2007; Hawken, 2006; Hawken & Horner, 2003; Hawken, MacLeod, & Rawlings, 2007; McCurdy, Kunsch, & Reibstein, 2007; Mong, Johnson, & Mong, 2011; Simonsen, Myers, & Briere, 2011; Todd, Campbell, Meyer, & Horner, 2008). In addition, several studies also demonstrate that CICO can be delivered with fidelity in school settings using typical personnel (Campbell & Anderson, 2011; Campbell & Anderson, 2008; Ennis, Jolivette, Swoszowski, & Johnson, 2012; Fairbanks, Sugai, Guardino, & Lathrop, 2007; Filter et al., 2007; Hawken, MacLeod, & Rawlings, 2007; Hawken, MacLeod, & O'Neill, 2011; McIntosh, Campbell, Carter, & Dickey, 2009; Mong, Johnson, & Mong, 2011; Simonsen, Myers, & Briere, 2011; Todd, Campbell, Meyer, & Horner, 2008). Finally, student, family, and teacher participants give positive ratings for the CICO intervention when surveyed about impact on problem behavior, improvement in academic outcomes, being worth the time and effort to implement, and recommending it as a treatment for other children with similar challenges (Filter et al., 2007; Hawken & Horner, 2003; Hawken, MacLeod, & Rawlings, 2007; Hawken, MacLeod, & O'Neill, 2011; Lane et al., 2012; Mong, Johnson, & Mong, 2011; Simonsen, Myers, & Briere, 2011; Todd, Campbell, Meyer, & Horner, 2008).

*Social Skills Instructional Groups*

Two relatively recent studies provide examples of social skills instruction as a Tier II intervention. First, Gresham, Bao Van, and Cook (2006) provided 60 hours of social skills instruction for a group of elementary-level students using a commercially published curriculum. In addition to small-group instruction led by a trained facilitator, classroom teachers implemented differential reinforcement of other behaviors as a strategy for promoting the generalization of skills across settings. Direct observation data indicated reductions in problem behavior for each of the participants. In addition, teacher ratings of problem behavior and social skill use also improved (Gresham, Bao Van, & Cook, 2006).

In a second example, students participated in a social skills group designed to increase effective communication and appropriate play. Social skills lessons were supported by the use of a self-management strategy, peer- and adult-mediated attention, and positive reinforcement for meeting behavioral goals (Marchant et al., 2007). In addition, a unique aspect of the study was the purposeful selection of students identified with internalizing characteristics. Results showed improvements for all participants.

*Check & Connect*

Check & Connect is an engagement model that incorporates the use of a mentor who conducts regularly scheduled checks of alterable risk indicators (e.g., attendance,

work completion, grades, disciplinary events, credit accrual, etc.) with a structured process for connecting with students and families (Christenson, Stout, & Pohl, 2012). Mentors provide specific feedback about student data, teach problem-solving skills, and maintain ongoing positive relationships among students, families, and school personnel. Early investigations conducted with high school-level participants identified with learning disabilities and/or emotional/behavioral disorders showed that students who received the Check & Connect treatment were more likely to stay enrolled in school, to persist through ninth grade, and to complete their course assignments than were students in a control group who did not participate in the program (Sinclair, Christenson, Evelo, & Hurley, 1998). In addition, students in Check & Connect earned more credits during their first year of high school, were more likely to be on track for graduation, and received better teacher ratings for behavior and academic competence than did control students (Sinclair, Christenson, Evelo, & Hurley, 1998). Subsequent studies of Check & Connect have expanded by including students without disabilities and have examined effects across grade levels spanning kindergarten through twelfth grade (Anderson, Christenson, Sinclair, & Lehr, 2004; Kaibel, Sinclair, & Vanden Berk, 2008; Lehr, Sinclair, & Christenson, 2004; Sinclair & Kaibel, 2002).

Although each of these interventions, as well as others described in previous sections of the chapter, indicate positive outcomes when implemented in isolation, the added value of providing small-group/targeted interventions within the framework of a school-wide PBS system is less known, but evidence is beginning to emerge. In one recent study, Nelson and colleagues (2009) used a quasi experimental longitudinal cohort design to examine the extent to which use of a three-tier model of behavioral interventions was associated with prevention of problem behavior and sustained behavioral improvements over time. Teacher ratings of problem behavior and social skills were assessed pre- and postintervention (i.e., fall and spring during the year of treatment) and then again at one- and two-year follow-up points (i.e., spring of the next two consecutive years). Students in the Tier II group showed immediate decreases in problem behavior, along with improved social skills when the Tier II intervention was provided in the context of a universal prevention framework (Nelson et al., 2009).

### *Tier III Supports*

The application of universal and targeted interventions will greatly reduce but not eliminate the number of students who require intense individualized support. What is emerging from the field is that SW-PBS may increase the capacity of schools to deliver more systematic and intensive targeted small-group and individual interventions (Crone, Hawken, & Bergstrom, 2007; Crone & Horner, 2003; Crone, Horner, & Hawken, 2004). Preliminary data from pilot studies are showing that functional-based interventions are outperforming traditional behavioral interventions (Ingram, 2002; Ingram, Lewis-Palmer, & Sugai, 2005; Newcomer & Lewis, 2004) and that plans are of higher quality if linked to school-wide PBS systems (McIntosh et al., 2008; Newcomer & Lewis, 2004). More research is needed to show

what additional benefit school-wide systems of PBS value-add to small-group and individual student support plans (Farmer, Lane, Lee, Hamm, & Lamber, 2012; Bradshaw, Koth, Thornton, & Leaf, 2009).

### *Limitations of the Research Base*

The study of SW-PBS represents a move from studies that evaluate the behavioral mechanism of single and small groups of students to large-scale randomized control trials. To an extent, many of the application studies have been conducted within the framework of scientific methodology, testing observable events with objective, reliable, and quantifiable data and using replicable procedures. However, the processes of SW-PBS represent a multicomponent package that is quite complex and bridges the gap between basic and applied science. Although data to date have shown encouraging results at the universal level, the value-add of the system approach in addressing small-group/targeted and individual supports is best described as emerging (Bradshaw, Koth, Thornton, & Leaf, 2009). The challenge remains to identify under what conditions the model yields significant outcomes and the active components that contribute to those outcomes. The following section briefly describes some of the issues associated with measuring large-scale system efforts to date.

### *Measures*

The science that underlies PBS, applied behavior analysis, provides a methodology for understanding and predicting target behaviors in a given context. As investigation and application move from controlled situations such as laboratories and clinics to the less structured school environment, greater flexibility is needed in using correlation analysis, data sources, and case studies (Carr et al., 2002). Because SW-PBS interventions are always multicomponent in nature, validity concerns arise due to the multiple interacting variables that come into play. Such interaction makes it difficult to measure the impact of individual variables. Analysis must take into consideration multiple-component interventions. Such analysis, however, does not meet the standards of the single-variable experimentation necessary to ascribe causality. Applied research practices must be flexible enough to study the pragmatic effectiveness of multicomponent interventions as well as the causal mechanisms of intervention package components to explain why a model worked and to specify the active components of the model.

### *Connections to Individual Supports*

In 1968, Baer, Wolf, and Risley established the importance of functional analysis to identify the environmental variables associated with the occurrence of target behaviors. In so doing, they laid the foundation for the application of applied behavior analysis to the study of human behavior and the functional relations between academic and social changes in adult and child behaviors. In the ensuing years, compelling evidence has accumulated to document the effectiveness of functional behavioral assessment and of positive behavior interventions and supports as having direct relevance for addressing

disruptive and chronic problem behavior in schools (Blair, Umbreit & Bos, 1999; Grow, Carr, & LeBlanc, 2009; Ingram, Lewis-Palmer, & Sugai, 2005; Lewis & Sugai, 1996a, 1996b). Although the technology exists to respond to the challenges of problem behavior, it has not “fit” the unique problem context schools present (Lewis & Sugai, 1999; Sugai & Horner, 1999; Sugai et al., 2010). Research has yet to identify a well-defined procedure that delivers precise, usable, valid information with the limited time and resources available to school professionals (Farmer, Lane, Lee, Hamm, & Lamber, 2012). Zins and Ponti (1990) suggest that establishing a “host environment” that can support and maintain evidence-based practices is essential to achieve specialized and individualized behavior supports for students with chronic problem behaviors and at-risk backgrounds. The systems perspective of SW-PBS provides the requisite structure to support the adoption and sustained use of effective practices (Sugai, Horner, & Sprague, 1999); however, to date, the systemic examination of function-based individualized interventions within the context of a complete SW-PBS continuum has not been undertaken (Farmer, Lane, Lee, Hamm, & Lamber, 2012).

As demonstrated in the research previously reviewed, a school-wide systems approach to PBS effectively reduces chronic challenging behavior, promotes cultures of social competence, and meets the needs of children with significant behavioral challenges, creating a host environment that emphasizes the development of a positive school climate, practical policies, well-defined physical spaces, and monitoring systems to improve academic and social outcomes for all students, but especially those who are considered at risk for behavior problems. With school-wide systems of PBS in place, schools increase their capacity to support students who present challenges by shifting away from traditional responses of solving behavior problems through suspension and exclusion to an approach that emphasizes the development of specially designed and individualized interventions based on functional behavioral assessments to generate an understanding of how the social and instructional context influence an individual student’s behavior. In doing so, these schools have redefined the roles and responsibilities of educators and all school personnel for promoting positive behavioral interventions, strategies, and support for students with chronically challenging behavior. Individual systems of PBS focus on integrated, team-based planning and problem solving to design individual support plans to prevent, reduce, and replace problem behaviors and to develop, maintain, and strengthen socially desirable behaviors. From research and application, we have learned the importance of a school-wide foundation of integrated systems, collaboration, and the development of proactive, practical interventions. When school personnel routinely reinforce positive behaviors and dedicate themselves to teaching social skills, then they increase the likelihood that individual support plans will be implemented with a high degree of integrity.

## CONCLUSION

School-wide PBS is defined as consisting of systemic and individualized strategies implemented through a continuum of supports based on data-based decision making. The literature on behavioral problems is clear in that early intervention and prevention are our best hopes at making schools safe and productive learning

environments (Ziglar, Taussig, & Black, 1992). Unfortunately, many educators have been slow to implement best practice until problems become chronic and entrenched (Kauffman, 1999), even though recent research has shown a clear link between “minor” discipline problems and later significant problems (Skiba & Peterson, 2000). Given that the school-wide PBS in essence is a process rather than a curriculum or packaged program, we are not suggesting that it is “the answer.” Yet work to date has demonstrated that schools can implement best practices at the prevention and early intervention levels. Essential components that characterize each level of the continuum include empirically validated practices such as clearly defined student expectations, strategies to teach expectations, and providing feedback during practice opportunities. The intensity of application of these basic components are then matched to the intensity of problem behavior, and connections are made to other resources necessary to support students and their families. The selection, application, and evaluation of practices are simultaneously supported through data-based decision making, using a team process that supports faculty and staff.

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