

RESEARCH-BASED PRACTICE

Comprehensive Behavioral Intervention for Tics in Children With Tourette Syndrome

BY DOUGLAS W. WOODS, JOHN C. PIACENTINI, & JOHN T. WALKUP

Tourette syndrome (TS) is one of three separate tic disorders. By definition, children with TS must have at least two motor (movement) tics and one vocal (or sound tic) for at least a year. The other tic disorders are chronic tic disorder (motor or vocal tics, but not both for at least one year) and transient tic disorder (motor and/or vocal tics for at least 4 weeks, but less than one year). TS is the most written about and studied of the tic disorders, but TS and the other tic disorders probably occur on a spectrum of complexity and severity.

CAUSES OF TS

TS is a genetically based neurological disorder that begins in childhood. Tics wax and wane in severity and change over time. The many genes that combine to cause TS lead to problems in the development of brain regions involved in the inhibition of unwanted movements. Because these brain regions also govern our interactions with the environment, the movements and sounds children with TS make may be related to what is happening around the child. So tics are predictably worse when children are under stress or excited (e.g., before a test or before an exciting play activity), and [CONTINUED ON PAGE 20]

RESEARCH-BASED PRACTICE



NANCY LOUIE/ISTOCKPHOTO

Students and Their Schooling: Does Happiness Matter?

BY SCOTT HUEBNER

With the increased emphasis on measuring school success primarily through academic outcomes, some might argue that school professionals cannot afford to pay much attention to students' well-being, especially to such a frivolous component as happiness. Indeed, even some positive psychologists who encourage greater attention to research and promotion of "optimal function-

ing" in adults and children are careful to discourage psychologists and other professionals from equating positive psychology with "happiology" as though the promotion of happiness is less important than the promotion of other positive psychology constructs (e.g., meaning in life, virtuous behavior, etc.). Although this author agrees with the notion that the promotion of happiness is a limited goal and does not represent the full array of in- [CONTINUED ON PAGE 24]

IMPLEMENTING RTI

Toward True Integration of Academic and Behavior Response to Intervention Systems Part One: Tier 1 Support

BY KENT MCINTOSH, STEVE GOODMAN, & HANK BOHANON

Increasingly, schools have been adopting comprehensive, three-tiered response to intervention (RTI) systems to support students in both academics and social behavior (McKinney, Bartholomew, & Gray, 2010). But with each new systems change initiative comes separate teams, data, and training and coaching systems.

Given the intensity of resources required to implement and sustain such systems, there has been increasing interest in integrating academic and behavior support into one system (Stewart, Benner, Martella, & Marchand-Martella, 2007; Stollar, Poth, Curtis, & Cohen, 2006). The focus on RTI provides an opportunity to blend academic and behavior systems into an integrated school-wide system of support for students. There are well-documented RTI systems for addressing both academics (Simmons et al., 2002; Vaughn & Fuchs, 2003) and behavior (school-wide positive behavior support, or SWPBS; Sugai & Horner, 2009), but less direction on how to integrate these systems effectively.

The purpose of this three-part article is to provide a framework for the integration of academic and behavior support for each tier of intervention in an RTI model. The first article will include a rationale for integrating academic and behavior support and a discussion of integrating universal academic and behavior support at the Tier 1 level. The second and third articles will describe the integration of support for students who do not respond to Tier 1 academic and/or behavior support [CONTINUED ON PAGE 14]

INSIDE

- 04 | School Psychology Awareness: Helping Every Student SHINE
- 10 | Making the Transition From Practitioner to Academic
- 30 | NASP-Approved/Nationally Recognized Graduate Programs in School Psychology
- 28 | 2011 CONVENTION NEWS
Visit "The Rock," Alcatraz in San Francisco

RTI Tier 1 Support

[CONTINUED FROM PAGE 1]

and require Tier 2 or 3 intervention.

LOGIC FOR AN INTEGRATED APPROACH

There are two primary reasons why integrating academic and behavior support should be considered. First, there is a documented connection between low academic skills and problem behavior, which is evident at school entry and increases over time (Nelson, Benner, Lane, & Smith, 2004). Students facing challenges in both areas are at an exponentially higher risk for negative school outcomes (Reinke, Herman, Petros, & Ialongo, 2008). Students with low academic skills at school entry are at increased risk of problem behavior and depression later in school (Herman, Lambert, Reinke, & Ialongo, 2008; McIntosh, Horner, Chard, Boland, & Good, 2006). As academic tasks become more difficult, students with skill deficits may increasingly use problem behavior to escape difficult tasks, limiting their access to academic instruction (McIntosh, Horner, Chard, Dickey, & Braun, 2008).

Fortunately, intervention in one area can lead to improvements in the other area as well. Implementation of SWPBS has been shown to lead to increased academic engaged time and enhanced academic outcomes (K. Algozzine & Algozzine, 2007; Horner et al., 2009; Lassen, Steele, & Sailor, 2006). In addition, high quality academic instruction by itself can reduce problem behavior (Filter & Horner, 2009; Preciado, Horner, Scott, & Baker, 2009), and students whose academic deficits are remediated in kindergarten are at dramatically reduced risk of developing chronic problem behavior throughout elementary school (McIntosh, Sadler, & Brown, 2010). Hence, it is not surprising that integrated academic and behavior RTI models have been shown to produce larger gains in both outcomes than single models (see a review by Stewart et al., 2007).

In addition, academic and behavior RTI systems share many common features and structures. Both systems typically organize support within a three-tiered prevention-focused model designed to deliver universal support to all students at Tier 1 and a continuum of additional support at Tiers 2 and 3 (Walker & Shinn, 2002). The focus on quality universal instruction for all students and use of evidence-based practices at all tiers is familiar to practitioners of both systems (B. Algozzine & Algozzine, 2009). Moreover, the use of team-based implementation and a problem-solving model is common across approaches (Tilly, 2008). Finally, both RTI systems use data to (a) implement practices with fidelity, (b) screen all students for additional support, (c) monitor responsiveness to intervention, and (d) inform instruction (Sugai, 2009).

PROMOTING SUSTAINABILITY THROUGH BRAIDING INITIATIVES

Rather than viewing academic and behavior systems as separate entities, school teams can examine how these systems are interrelated and combine efforts accordingly. The presence of competing initiatives in a school or district puts both initiatives at a disadvantage. New initiatives may be threatened because existing systems serve as a status quo that is resistant to change (Fixsen, Blase, Horner, & Sugai, 2008), and simultaneously, personnel may abandon effective practices to implement new, fad initiatives (Latham, 1988). Though taking time and resources to consolidate multiple systems may seem like a threat to the sustainability of each system, integrating academic and behavior RTI systems represents a unique opportunity to enhance the sustainability of both systems (McIntosh, Horner, & Sugai, 2009).

A salient metaphor for integrating systems is the concept of braiding. Braiding refers to building the practices of any new initiative into the fabric of existing programs and priorities within the building and district (McLaughlin & Mitra, 2001). It involves identifying how parallel practices, systems, and data may be combined into a coherent, unified set of daily responsibilities with a common language. Once braided, these systems can then be embedded within the school improvement planning process. The braiding process begins through identifying the common, valued outcomes for the school and district (Fixsen, Naom, Blase, Friedman, & Wallace, 2005; McIntosh, Horner et al., 2009). Both academic and behavior RTI

KENT MCINTOSH, PhD, NCSP, is an assistant professor of school psychology at The University of British Columbia in Vancouver, BC. STEVE GOODMAN, PhD, is codirector of Michigan's Integrated Behavior and Learning Support Initiative (MiBLSI), a project funded by Michigan Department of Education. HANK BOHANON, PhD, is an associate professor of special education at Loyola University of Chicago. This article is adapted from material originally published by the RTI Action Network (<http://www.rtinetwork.org/learn/behavior>), copyright 2009 by National Center for Learning Disabilities, Inc. Used with permission.

systems share a range of common outcomes, including maximizing time for instruction, enhancing student-teacher relationships, fostering school connectedness, and improving academic and social competency for all students (Walker & Shinn, 2002). Once these shared outcomes are identified, it becomes easier to identify components of each initiative that would benefit from integration.

INTEGRATING TIER 1 SUPPORT

There are many opportunities to integrate features of each system at the Tier 1 level. Examples of integration will be described using three overlapping components that are shared across both domains: *practices*, *systems*, and *data* (Sugai & Horner, 2009). Each of these components are aligned to produce valued outcomes for students.

PRACTICES

Effective Tier 1 practices have been described in detail for academics (Kame'enui & Simmons, 1990) and behavior (Sugai & Horner, 2009). Though the content differs, the same principles of instruction apply, and strategies can be shared across domains to improve outcomes. Key features of quality practices within Tier 1 include: (q) focusing on big ideas, (b) effective instruction, (c) monitoring, and (d) positive feedback and encouragement.

Big ideas. Rather than dedicating equal instructional time to all content, outcomes can be improved by aligning content according to big ideas of instruction in both academics and behavior. Big ideas help guide teachers on what is essential to teach and provide a framework for student learning (Coyne, Kame'enui, & Carnine, 2007). Most school psychologists are familiar with big ideas of beginning reading (National Reading Panel, 2000), but the same process can be used in social behavior. In SWPBS, three to five behavior expectations are identified that describe important lifelong social competencies (e.g., be respectful, be responsible, be safe; Sugai & Horner, 2009). Just as academic big ideas identify what is important to teach, behavior expectations provide curriculum anchors for teaching social-emotional competence.

Effective instruction. In addition to focusing on the most important content, consideration should be given to the principles of effective instructional delivery (Coyne et al., 2007). Social-emotional competencies can be taught much like academic skills, through modeling examples and nonexamples of appropriate behavior so that students clearly understand the concepts being taught (Langland, Lewis-Palmer, & Sugai, 1998). Students are then provided with practice to build fluency in prosocial behavior, just as in academics.

Monitoring. In academic and behavior support, it is important to monitor student progress to determine if students are performing skills (e.g., decoding, requesting help) correctly. Frequent monitoring allows school personnel to acknowledge correct responses and errors. Errors are identified and corrected so students do not spend time practicing incorrect responses. In academics, errors provide an opportunity to investigate student understanding of the subject. Teachers help students correct the mistake and then provide additional practice to ensure that content is mastered (Coyne et al., 2007). Similarly, problem behavior can first be assumed to be behavioral mistakes. Teachers can reteach expectations and reinforce correct practice before providing punitive consequences for inappropriate behavior.

Positive feedback and encouragement. Until students are successful and can access natural reinforcement for using skills (e.g., reading for pleasure, making new friends), formal recognition systems can provide students with the motivation and encouragement to persevere until skills are mastered. Recognition systems developed through school-wide behavior systems, both formal (e.g., ticket systems, recognition assemblies) and informal (e.g., verbal praise, encouragement), can be used to shape social behavior across the school and academic effort in the classroom. Tangible acknowledgement systems prompt staff to acknowledge students regularly, acting as the system to support adults in the practice of frequent positive feedback.

Figure 1. Yearly form for tracking implementation and effectiveness of Tier 1 support.

		Fall Benchmark	Winter Benchmark	Spring Benchmark
Behavior	Fidelity of implementation of Tier 1 behavior support (% of critical features)			
	Percent of students with 0 to 1 major office discipline referrals			
Academics	Fidelity of implementation of Tier 1 behavior support (% of critical features)			
	Percent of students meeting benchmark criteria (on track for positive outcomes)			
	Percent of students who met previous benchmark and remained at benchmark			

SYSTEMS

Systems are the structures, routines, and policies needed to support adults in implementing practices and using data effectively (Sugai, Horner, & McIntosh, 2008). One clear opportunity for integrating academic and behavior support involves examining the structures of school teams. Typically, each initiative will have its own school teams (e.g., grade level academic teams and behavior problem solving teams). When considered individually, this approach seems to make sense, but too many teams can overload school personnel. Instead, academic and behavior RTI teams can be combined at each tier. School teams can take advantage of the shared goals, common structures, and data from both systems. However, if combined, it is critical that team members have content knowledge in both areas, as the gain in efficiency may be outweighed by a loss in effectiveness (Stollar et al., 2006). An alternative is to have one core team with different membership at the academic and behavior levels, depending on the goals of the specific meeting (Martinez, Vickers, Rodriguez, Callahan, & Overton, 2009). District leadership teams and coaching structures can be combined using the same logic.

DATA

Though the data used in academic and behavior RTI models vary, all practices are enhanced by the same structure of data-based decision making. In both models, school personnel identify data systems to monitor student performance, interpret data in regular cycles, and modify school-wide and individual interventions based upon response (Sugai, 2009).

Two types of data are needed to evaluate the effectiveness of Tier 1 support: fidelity of implementation and student outcomes data. School personnel implementing SWPBS are familiar with research-validated fidelity measures such as the School-wide Evaluation Tool (Sugai, Lewis-Palmer, Todd, & Horner, 2001) and Benchmarks of Quality (Kincaid, Childs, & George, 2005). In academics, fewer measures are available, but a checklist for school-wide reading support, the Planning and Evaluation Tool (Kame'enui & Simmons, 2003), has been developed based on SWPBS measures. Student outcomes data can include screening three times per year with curriculum-based measurement (Shinn, 1989) for academics and continuous collection of office discipline referrals (ODRs) for behavior. Both are used to monitor the effectiveness of school-wide intervention, target areas for improvement, and screen students for additional support. Figure 1 is a sample tracking form for integrated teams to measure fidelity and effectiveness of academic and behavior support.

Once data are compiled, the integrated team determines the effectiveness of Tier 1

support and modifies the existing systems as data indicate (McIntosh, Reinke, & Herman, 2009). For example, screening data may indicate that the Tier 1 reading program should be strengthened with additional strategies in a specific skill, such as decoding. ODR data may indicate behavior problems in a specific setting, and modifications may involve reteaching expectations and active supervision in that setting.

DEMONSTRATION OF IMPROVED STUDENT OUTCOMES

As described above, integrating RTI systems has significant potential for enhancing outcomes in both areas. Michigan's Integrated Behavior and Learning Support Initiative (MiBLSi) is an RTI program funded through the Michigan Department of Education with the goal of improving both behavior and reading skills at a school-wide level in over 600 schools (Ervin, Schaughency, Goodman, McGlinchey, & Matthews, 2006). Since the start of integration efforts in 2004, the percent of students meeting DIBELS reading benchmarks has increased by an average of 5% each year from 2004 to 2009. In the same time period, rate of ODRs per year has decreased by an average of 10% per year (Goodman, McGlinchey, & Schallmo, 2010). As shown, improvement in one area has consistently been associated with improvement in the other, and overall effectiveness has increased over time. These successes, across both academics and behavior, can provide the motivation to keep an integrated model in place.

CONCLUSION

It may seem from this article that integrating initiatives sounds logical, but also daunting. However, it is certainly less difficult than sustaining two unrelated systems. Implementing two major initiatives in isolation in the same building can lead to burnout and failure to capitalize on sharing resources that can support the same outcomes. If sustaining both academic and behavior RTI systems is the primary goal, it may be the only option. ■

References

- Algozzine, B., & Algozzine, K. M. (2009). Facilitating academic achievement through schoolwide positive behavior support. In W. Sailor, G. Dunlap, G. Sugai, & R. H. Horner (Eds.), *Handbook of positive behavior support* (pp. 521-550). New York: Springer.
- Algozzine, K., & Algozzine, B. (2007). Classroom instructional ecology and school-wide positive behavior support. *Journal of Applied School Psychology, 24*, 29-47.
- Coyne, M. D., Kame'enui, E. J., & Carnine, D. (2007). *Effective teaching strategies that accommodate diverse learners*. Upper Saddle River, NJ: Prentice Hall.
- Ervin, R. A., Schaughency, E., Goodman, S. D., McGlinchey, M. T., & Matthews, A. (2006). Merging research and practice agendas to address reading and behavior school-wide. *School Psychology Review, 35*, 198-223.

Discover the Power of 3

KeyMath™-3 delivers a new formula for success—with 3 linked components to help you assess and improve math skills in students ages 4½ through 21!

KeyMath-3 Diagnostic Assessment

Newly revised, this in-depth measure of math proficiency now features all new content aligned with NCTM standards.

KeyMath-3 ASSIST™ Scoring and Reporting Software

This easy-to-use software provides multiple report options including a progress monitoring report, a score summary report, and a link to math intervention resources.

KeyMath-3 Essential Resources

This powerful new companion tool delivers math interventions directly tied to results of the Diagnostic Assessment. One click automatically generates a customized intervention plan based on each student's individual assessment scores.

KeyMath³



PEARSON

800.627.7271 | PsychCorp.com

PsychCorp
a PEARSON brand

Copyright © 2010 Pearson Education, Inc. or its affiliate(s). All rights reserved. ASSIST, KeyMath, Pearson, and PsychCorp are trademarks, and the Design for Psi is a registered trademark, in the U.S. and/or other countries, of Pearson Education, Inc. or its affiliate(s). 4165 10/10 A4B

Copyright of Communique (0164775X) is the property of National Association of School Psychologists and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.