

Chapter 5

Alignment of Mental Health Screening with Response to Intervention Approaches

Introduction

Following the most recent reauthorization of the Individuals with Disabilities Education Act, now called the Individuals with Disabilities Education Improvement Act (IDEIA 2004), the response to intervention (RtI) model has come to the forefront of psychological debate and scrutiny. IDEIA now permits the use of alternative models when assessing and determining special education eligibility, including the use of an RtI approach. The act states that a local education agency “may use a process that determines if the child responds to scientific, research-based intervention as a part of the evaluation procedures.”

The No Child Left Behind Act (2002) has also helped to set the stage for an RtI revolution by providing a set of requirements whereby states must implement evidence-based instruction and monitor progress to verify the effectiveness of these programs (Brown-Chidsey and Steege 2005). Additionally, the President’s Commission on Excellence in Special Education (2002) called for schools to implement identification and assessment models based on students’ responses to evidence-based interventions and monitoring of the level of response.

Although RtI theory and practices are traditionally rooted in the areas of academic problems and learning disability assessment (Fairbanks et al. 2007), these principles are beginning to be applied to other disabilities in the emotional and behavioral domain (Cheney et al. 2008; Gresham 2005). We will begin with a discussion of the general principles of RtI, followed by a more specific discussion as to how these principles might be applied to the practice of screening for emotional and behavioral problems.

Principles of Response to Intervention

RtI is a multitiered approach to providing prevention and intervention services to all students within a school, which can be applied to both academic and behavioral outcomes of the students (Brown-Chidsey and Steege 2005; Parisi et al. 2014). Within an RtI framework, those individuals who do not respond to intervention even upon attempts to extend, intensify, and modify the intervention based on data-based decision-making may eventually receive a diagnosis of a disability; however, one of the goals of RtI is to identify and intervene with as many students as possible in order to create an opportunity to prevent difficulties from worsening. Thus, RtI is a prevention-based model that stresses the use of evidence-based intervention practices prior to special education referral, moving away from the “wait to fail” approach often utilized in schools. One must also keep in mind that although RtI is often linked exclusively with assessment and special education decision-making, it also serves as a general education-based tool for monitoring student progress and providing effective instruction and academic interventions.

RtI models typically include (Fairbanks et al. 2007; Harris-Murri et al. 2006; Johnson and Smith 2008) (a) a continuum of evidence-based instruction and interventions available to all students, from universal, high quality, scientifically based general education classroom instruction to highly intensive and individualized interventions; (b) regular school-wide screening of academic performance and behavior to monitor the status and progress of all students; (c) decision points to determine if students are performing significantly below the level of their peers on each indicator assessed; (d) implementation of research-based interventions at all tiers and more intensive or different interventions when students do not improve, as determined through data collected in response to an intervention; (e) on-going progress monitoring of student performance throughout intervention phases; and (f) referral and evaluation for special education services if students are nonresponsive to all attempted interventions. Although we will briefly touch upon each of these components, our main focus will be on the implementation of screening within an RtI approach.

Response to Intervention Models: Tiers and Types

A typical RtI model consists of either three or four tiers, most commonly three tiers, derived from the public health model of prevention (Brown-Chidsey and Steege 2005; Glover and DiPerna 2007; see Fig. 5.1). Tier 1 includes all students and reflects the general education curriculum with regular progress monitoring. Universal screening and prevention mechanisms help to identify risk status and rule out inadequate instruction or behavior management. Tier 2 includes those students who are not responding adequately to Tier 1 instruction and prevention as reflected in universal screening and progress monitoring results, and need more intensive and specific instruction in order to be successful. These students often receive small-

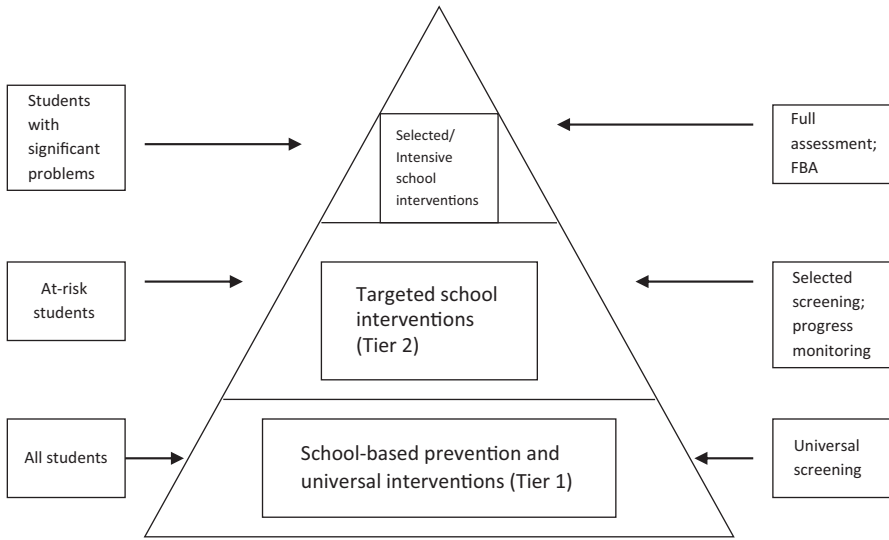


Fig. 5.1 Response to intervention model

group evidence-based instruction for academic problems or short-term, less intensive interventions for behavioral or emotional challenges, along with regular progress monitoring. Tier 3 includes a small subset of students who do not respond to Tier 1 or Tier 2 interventions. This tier necessitates more intensive, individualized interventions and a comprehensive assessment to identify whether the student has a specific disability or meets the criteria for special education. Notably, students do not move from one tier to another without data indicating a need to do so (Brown-Chidsey and Steege 2005).

A four tier model, as described by Klingner and Edwards (2006), might consist of:

Tier 1: Quality instruction within the general education classroom paired with ongoing progress monitoring.

Tier 2: Intensive interventions for those identified using progress monitoring.

Tier 3: Use of a teacher teaming approach, where teams develop interventions for students who continue to display a need for individualized support following the Tier 2 interventions.

Tier 4: Assessment of the severity of the skill deficit, and evaluation of need for special education.

Additionally, two basic versions of RtI exist: the *problem-solving model* and the *standard protocol model*. In the problem-solving model, a four step problem-solving process consisting of problem identification, problem analysis, plan implementation, and problem evaluation is used to select research-based interventions specifically tailored to meet the needs of a particular student. This approach is very sensitive to the unique problems of each individual student, but it is much more difficult to implement and maintain the standardization and controls necessary to

evaluate the effectiveness of such an approach. For example, under the problem-solving model, several students with attention difficulties would each have their own individually selected intervention to best match their specific needs and challenges.

The standard protocol model, on the other hand, provides the same empirically validated intervention across all students with similar difficulties. This approach is less individualized, but allows for greater quality control (Atkins 2008). Under the standard protocol model, all students who are identified as having attention difficulties would receive the same intervention, such as teaching them behavioral self-monitoring strategies, and the effectiveness of this approach would be evaluated using progress monitoring across all students. Although this model is not as attentive to the unique needs of every student, it is believed to be more efficient than the problem-solving model both in terms of time and monetary resources needed to learn and delivery the necessary interventions to those students in Tiers 2 and 3.

Applying RtI to Emotional and Behavioral Problems

Gresham (2005) has proposed that RtI be employed as an alternative means to emotional and behavioral disorders (EBD) eligibility determination and in making decisions about modifying or maintaining certain interventions by considering a student's level of responsiveness to a particular intervention. Gresham (2005, p. 331) explained "if a student's behavioral excesses and/or deficits continue at unacceptable levels subsequent to an evidence-based intervention implemented with integrity, then the student can and should be eligible for services." A lack of improvement from the assessed baseline and post-intervention levels of performance might be taken as partial evidence for a need for special education referral. In addition to being used as a tool for identifying children with emotional and behavioral disorders, early screening and identification of all children coupled with the application of RtI and early intervention for those found to be at-risk for emotional and behavioral disorders would lead to more pre-referral intervention in the general-education setting and give the school the ability to act within an intervention framework rather than a "wait to fail" special education eligibility-based framework (Cheney et al. 2008; Gresham 2005).

Universal Screening

Universal screening for behavioral and emotional risk is the initial step to applying the RtI framework to prevention and intervention with behavioral and emotional outcomes in schools. At Tier 1, all students are screened for behavioral and emotional strengths and weaknesses. The purpose of this screening is twofold. First, school leaders and stakeholders review the school-wide results in order to determine whether there is a need to change or supplement the current school-wide

prevention strategies being delivered universally. Second, if these Tier prevention programs are deemed to be effective at addressing the behavioral and emotional needs of the majority of the students (typically 80–85%), then the universal screening data are used to identify those students who should be considered for more targeted interventions at Tier 2.

Parisi et al. (2014) review several common pitfalls to avoid when conducting universal screening within an RtI framework that are applicable to our discussion. First, collecting the data is not enough; screening data must be used in a systematic way to inform decision-making regarding intervention at each tier within RtI. Second, there must be adequate buy-in regarding the importance and use of screening data to make decisions within a narrow timeframe. However, complete consensus is rarely achieved and should not be expected before moving forward with a plan for behavioral RtI. Third, the selection of a screening instrument should not be taken lightly as each instrument will assess only some constructs, utilize certain informants, and need particular resources. We hope our review of some of the more widely-used screening instruments presented in Chapter 4 will assist the reader in the critical task of instrumentation selection.

Finally, those embarking upon an RtI approach to addressing the behavioral and emotional needs of students within their schools should be aware that universal screening is not a one-shot task. Instead, RtI requires an iterative process of assessing the needs of students at all tiers of intervention and making adjustments accordingly. However, there is no single clear answer regarding how frequently universal screening should be conducted at Tier 1. Although, recommendations regarding the frequency of screenings have been put forward, they are largely based on practical concerns rather than data. Most agree that screening should take place at least once a year, usually at the beginning of the school year, in order to determine the course of action for that year (Dowdy et al. 2014; Walker 2010). Others recommend screening three times per academic year, typically in the fall, winter, and spring, in order to inform prevention and intervention decisions (Parisi et al. 2014; Walker et al. 2014). However, there remains a need to empirically evaluate screening frequency recommendations and the stability of screening scores to determine the optimal screening schedule for schools, which may vary depending upon the specific goals of the RtI and the instrumentation used.

Intervention

Gresham (2004) divides behavioral interventions into four broad theoretical categories: (a) applied behavior analysis (ABA) or functional behavioral assessment; (b) social learning theory; (c) cognitive-behavioral therapy; and (d) nebehavioristic stimulus–response (S–R) theory. ABA focuses on identifying the function of the behavior and targeting antecedent and consequent events. A functional behavior analysis (FBA) is a problem-solving process in which broad and specific information about a student’s behavior is gathered (e.g., observations, interviews, record re-

view, rating scales, and permanent products) to determine the underlying purpose or function that the behavior serves. This information can then be utilized to develop interventions to change behaviors of concern and to teach new behavior patterns. This may be done by changing antecedent conditions likely to precede the target behavior, teaching alternative prosocial behaviors that serve the same function as the target behavior, and decreasing access to desired consequences that follow the target behavior and increasing access to desired consequences when engaging in appropriate behavior. Social learning theory (Bandura 1977) focuses on the concept of vicarious learning, modeling, and reciprocal determinism, or the effect an individual's behavior has on the environment and vice versa. Cognitive behavioral therapy focuses on changing maladaptive cognitions leading to a change in behavior. Lastly, neobehavioristic S-R models are based on the idea that maladaptive responses are conditioned to stimuli in the environment. Each of these theories makes various assumptions regarding the causes of problem behaviors. Many students require intervention strategies from more than one of these models to be responsive.

In an RtI model, the strength/intensity (i.e., group size, frequency, and duration) of behavioral interventions is organized along a continuum, ranging from Tier 1 classroom interventions to Tier 3 individualized behavior plans. A key concept in RtI is matching the intensity of intervention to the intensity and severity of the presenting problem (Gresham 2004). Additionally, one must keep in mind that simply intensifying an intervention when a child is nonresponsive will not necessarily address the problem if the intervention is not appropriately matched to his or her needs (Daly III et al. 2007). Schools must also balance the strength of the intervention with available resources to ensure that each student is receiving appropriate interventions for his or her skill level. "Not all students will require the most intense form of behavioral or academic interventions and the strength, intensity, and duration of treatment should be increased in direct proportion to the student's unresponsiveness to that treatment" (Gresham 2004, p. 333).

Tier 1, or universal interventions, are meant to target all students in a classroom, school, or district and are delivered to all students in the same manner. Examples of Tier 1 interventions include classroom management strategies, school-wide discipline plans and codes of conduct, district-wide bullying prevention programs, and social skills training in the general education classroom. Universal interventions are estimated to be effective with approximately 80–90% of a given school population (Colvin et al. 1993; Sugai et al. 2002).

Tier 2, or selected, interventions target those students who are unresponsive to Tier 1 interventions. These students are considered to be at-risk for emotional and behavioral problems and require more targeted interventions often delivered in a small group setting. Tier 2 interventions may include daily behavior report cards, behavioral contracts, self-management strategies, social skills training groups, and token systems. As explained by Gresham (2004, p. 330), "these interventions typically are not based on an analysis of behavioral function but can be characterized more accurately as behavior modification rather than behavior analytic."

Lastly, Tier 3, or targeted, interventions focus on the 1–5% of the student population that do not respond to Tier 2 interventions, are responsible for 40–50% of

behavioral disruptions in the schools, and drain 50–60% of the school and classroom resources (Colvin et al. 1993; Sugai et al. 2002). These interventions are more intense, individualized, and comprehensive than Tier 1 or Tier 2 interventions. These interventions often use functional behavioral assessment methods to develop individualized behavior plans that may include strategies such as the development of social stories, daily communication with parent, and teaching of positive replacement behaviors.

Progress Monitoring

In order to monitor student progress adequately and make decisions regarding the effectiveness of interventions and student gains, or lack thereof, schools must collect data frequently and evaluate change over time using these data (Cheney et al. 2008). Methods that have been identified as potential progress monitoring tools include behavior ratings scales, permanent products, and systematic direct observation. Although each method offers unique strengths, each also has significant limitations that must be considered when deciding how to effectively monitor progress (Riley-Tillman et al. 2007).

Selecting a behavior rating scale to monitor progress may be appealing due to the ease of use and wide availability of such assessments. However, it is critical to select a scale that adequately covers the domain of interest that is being targeted by the intervention. Most broadband behavior rating scales are not designed to be administered on a frequent basis (e.g., BASC-2, Reynolds and Kamphaus 2004) and narrowband rating scales that have this ability (e.g., ADHD Rating Scale-IV, DuPaul, Power, Anastopoulos, & Reid 1998; BESS, Kamphaus and Reynolds 2007) still include a large number of items, making them somewhat cumbersome to complete repeatedly when the goal is to monitor progress on a bi-weekly, weekly, or even daily basis. Additionally, rating scales tend to lack the sensitivity to detect small daily changes in behavior required for frequent progress monitoring. Currently, two rating scales with particular promise for progress monitoring are the BASC-2 Progress Monitor (Reynolds and Kamphaus 2009) and the web-based progress monitoring tool (Marquez et al. 2013), both of which are between 12–20 items, depending upon the form selected. A full discussion of these tools is beyond the scope of this volume; readers are directed to consult the original citations for further information.

The use of permanent products (e.g., social behavior grades, discipline referrals, or token economy charts) for progress monitoring is popular due to the ease of collection and lack of effort needed on the part of the teacher and others interested in monitoring progress. However, although academic permanent products are generated on a daily basis, it is unlikely that school personnel will have access to a sufficient number of behavioral permanent products to monitor progress of individual students frequently. When the behavior of interest is a lower frequency behavior that would warrant a disciplinary referral or other recorded action, then the use of permanent products might be sufficient; however more minor disruptions such as

calling out may not have adequate data readily available in the natural environment (Riley-Tillman et al. 2007). Furthermore, the use of permanent products tends to lend itself to the monitoring of externalizing behaviors; progress monitoring for students with internalizing difficulties will likely need to take another form (e.g., rating scales; Severson et al. 2007).

Systematic direct observation (SDO) is a popular method of progress monitoring (Barnett et al. 2006; Riley-Tillman et al. 2007). Unlike naturalistic observation, during which an observer enters a specific setting (e.g., a classroom) and observes all that occurs with no predetermined set of behaviors in mind, systematic direct observation involves objectively observing specific, operationally-defined behaviors in a carefully selected and specified time and place using standardized procedures. Additionally, scoring and summarizing of data is also standardized and should not vary from one observer to another (Salvia and Ysseldyke 2001). Although this method has the potential to provide valuable information regarding a student's behavioral progress, a major obstacle is the amount of time and resources needed to adequately gain a reliable estimate of a target behavior, especially those behaviors of low frequency (Riley-Tillman et al. 2007). Hintze and Matthews (2004) found that up to four observations per day over 4 weeks may be necessary to obtain a reliable estimate of a behavior such as "being on task." Also, similar to permanent products, SDO is often more appropriate for monitoring progress when externalizing behaviors are being targeted, as internalizing problems are more difficult to observe directly.

An alternative and/or supplementary source of information that may be utilized in monitoring behavior is the daily behavior report card (DBRC; Chafouleas et al. 2005), which has been utilized as an intervention and progress monitoring tool and has preliminary support as a supplement to SDO. Typically, a DBRC lists a number of target behaviors on which the student is rated, at least daily, usually by his or her teacher. Riley-Tillman et al. (2007) list four characteristics of a systematic DBRC: "1) the behavior of interest is operationally defined, 2) the observations should be conducted under standardized procedures to ensure consistency in data collection, 3) the DBRC should be used in a specific time and place, and 4) the data must be scored and summarized in a consistent manner" (p. 79). Similar decisions regarding intervention responsiveness were found to be made based on either teacher-based DBRCs or SDO data, providing some evidence for the validity of inferences made based on the DBRC (Riley-Tillman et al. 2007). However, limitations include the influence of rater perception of student behavior and a lower sensitivity to change than a full SDO.

Assessing Responsiveness

One of the central issues associated with RtI concerns how to ascertain whether a student is "adequately" or "inadequately" responding to an intervention following a positive at-risk screen. The development and application of data-based decision cri-

teria to school-wide screening and progress monitoring of at-risk students is needed (Glover and DiPerna 2007). Gresham (2005) recommends that “this decision must be made at the local and individual level by an assessment and placement team and will most certainly vary across cases and schools...” (p. 332). According to Gresham (2005), factors that might affect a student’s response to an intervention include the severity and chronicity of the behavior, generalizability of behavior change, treatment strength and integrity, and treatment effectiveness. So how might one assess whether or not an intervention was effective in changing a behavior? Four possible approaches to making this decision include: (1) visual inspection of data, (2) reliable changes in behavior, (3) changes in social impact measures, and (4) social validation (Gresham 2005).

Visual Inspection of Data

Visual inspection of data involves graphing data collected and visually comparing baseline to intervention phases without the use of statistical analyses. One would assume that if a student is responsive to a particular intervention it should be noticeable by simply viewing the data graphically. However, the absence of standards or criteria for deciding what constitutes adequate behavior change may lead to unreliable decision-making.

Reliable Changes in Behavior

In order to ascertain whether a change in behavior is reliable and not due to chance or extraneous variables, five metrics have been proposed (Gresham 2005): (a) absolute level of change indices; (b) reliable change in score indices based on standard error; (c) percent of data points that do not overlap between baseline and intervention phases; (d) percent change between baseline and intervention; and (e) effect size estimates. *Absolute change* examines the amount of behavior change without comparison to other groups. According to this metric, a student is considered “responsive” if the degree of absolute change is large relative to the amount of change between baseline and post-intervention levels of performance, if an individual no longer meets the established criteria for an emotional disturbance, or if behavior problems are completely eliminated (Gresham 2005). One problem with metrics of absolute change is that they do not take functional impairment into account; a student may have a large degree of change between the baseline and post-intervention data, but may still be functionally impaired within the general education setting.

The *reliable change index (RCI)* takes the standard error, or the variability in the distribution of change scores that would be expected if no actual change occurred, of the difference between pre- and post-intervention performance into account. RCI is calculated by subtracting an individual’s post-intervention performance on an outcome measure from his/her pre-intervention performance score and dividing by

the standard error. Keep in mind that the RCI is affected by the reliability of the outcome measures used. As always, the psychometric properties of the instrument of interest should be considered prior to making decisions based on its results.

To determine the *percentage of nonoverlapping data points (PND)* an individual's baseline scores are plotted against their post-intervention scores and the number of data points from the post-intervention phase that do not overlap with the baseline data points are identified. This number is then divided by the total number of data points in the post-intervention phase (Gresham 2005). Limitations of this metric include: Not reflecting the magnitude of change, and skewed baseline trends (very high or low data points) or outlier data points that affect interpretation. In addition, floor effects can occur when the beginning baseline score is so low that even in the presence of change, no change is reflected in the PND; similarly, ceiling effects can have a detrimental impact on the interpretation of the PND when scores are so high on the measure that absolute change is difficult to detect. In order to avoid some of these potential pitfalls, Gresham (2005) has recommended using the *percentage of change* as an alternative to the PND. This metric compares the mean level of performance during the baseline phase to the mean level of performance during intervention thus minimizing the effect of outliers and floor and ceiling effects. However, a shared limitation of the percent of change is that no clear guidelines exist for determining what magnitude of behavior change is sufficient to say that an individual has responded adequately to the intervention.

As recommended by Gresham (2005), an individual effect size can be calculated without making any assumptions about the distribution of the data points by subtracting the intervention mean from the baseline mean and then dividing this difference by the standard deviation of the baseline mean (Busk and Serlin 1992). A second approach assumes homogeneity of variance in the data points and uses the pooled standard deviation calculated from baseline and intervention phases in the denominator.

Cheney et al. (2008) utilized a daily progress report to monitor the progress of three to five behavioral expectations and the number of class periods a day. At the end of each class period, teachers met briefly with the students to assess their behavioral performance for that period and rated their behavior on a scale of 1–4 on each expectation during that class period. Students were considered “successful” for that day if they earned 75% of the total points possible. Cheney et al. (2008) attempted to use all five metrics in their RtI study. They preferred the percentage of change to the other metrics, as it allowed the researchers to examine responses based on the number of days a student met the criteria in post-intervention versus baseline. They found that, overall, percentage of change and effect size were more sensitive than absolute change in detecting responses to interventions. The RCI metric failed to identify some students as responsive who actually appeared to be on a positive trajectory, which is problematic for a progress monitoring metric. Furthermore, the PND suffered in performance due to ceiling effects. Although this study recommends using percentage of change, more research on these and other potential metrics of progress monitoring are necessary to effectively implement this phase of an RtI approach to addressing behavioral and emotional problems.

Changes on Social Impact Measures

In addition to assessing the statistical or empirical magnitude of change, it is perhaps even more critical to assess whether progress has translated into perceivable change in the classroom. In other words, change can be statistically significant without being functionally significant. A social impact measure allows us to look at changes that are recognized as important in everyday life (Kazdin 2003). Social impact measures might include days missed from school, school suspensions, number of fights in the classroom, and disciplinary referrals. One drawback to these types of measures, as described in the previous section, is that they are not particularly sensitive to short-term intervention effects. As Gresham (2005, p. 338) explained, “it is often the case that rather large and sustained changes in behavior are required before these changes are reflected on social impact measures.”

When addressing social validity in relation to treatment effectiveness in an RtI model, it is important to focus on the perception of intervention effects by others, such as teachers, in addition to objective measures such as attendance. Gresham and Lopez (1996) suggest using teacher and parent normative behavior rating scales as a means of quantifying the social importance of intervention effects. Additionally, comparing a target student’s behavior to one of his non-referred peers through observation could also help estimate the social importance and overall functioning of the student in the classroom. Based on current information, best practice may be to supplement the other statistical metrics reviewed previously with one or more social validation measures, in order to determine whether data from both sources offer the same conclusion when monitoring progress.

An Example

Fairbanks and colleagues (2007) described an RtI standard protocol model to address social behavior concerns in a public elementary school. Tier 1 (universal system) was implemented school wide and consisted of explicitly teaching school-wide expectations, implementing a positive reward system to acknowledge meeting those expectations, and regularly reviewing progress toward school-wide goals. The implementation of evidence-based classroom management strategies would also fit into the Tier 1 system.

Students who were identified by teachers as not being successful under the Tier 1 level of intervention then received more targeted, Tier 2, interventions. These interventions may be implemented in a small group setting during which students develop specific skills that they are lacking. Fairbanks and colleagues (2007) used a “check in and check out” (CICO) or a DBRC at this level of intervention. In this study, the CICO procedure was utilized as an intervention rather than a progress monitoring tool. The CICO program was meant to provide students with “a) increased structure and prompts, b) additional instruction in specific skills, and c) increased regular feedback” (Fairbanks et al. 2007; p. 294). Students could earn a

total of 36 points each day based upon their behavior during six, 60-minute time periods throughout the school day. Teachers rated the students at the end of each designated time period on a scale of 0–2 and gave the students feedback in the form of praise or corrective feedback. Additionally, each student with a CICO card tallied up their points at the end of the day and reported it to the class. If the students' cumulative points for that day met a certain criterion, the entire class earned a reward. The criterion was increased several times over the course of the study.

Students who continued to be unsuccessful despite Tier 2 interventions, based upon direct observation data and teacher and counselor nomination, then moved to Tier 3 and received more comprehensive assessments to help with choosing or developing a more personally tailored intervention (Fairbanks et al. 2007). In this particular study, a student was considered unresponsive to intervention if he/she showed little to no improvement in behavior, or an increase in problematic behavior. At this stage, a more formal functional behavioral assessment (FBA) was conducted in order to inform an intervention plan. Following completion of the FBA, a behavior plan was developed for each student that included information about the student's strengths, the target behavior, antecedent variables affecting that behavior, perceived maintaining consequences, and alternative behaviors that might be taught in place of the target behavior.

Although the sample sizes in this study were small and generalizability may therefore be limited, results do suggest that the use of RtI logic with behavior problems appears to be promising. The use of the CICO card was effective in improving the behavior of four students whose problem behaviors were unresponsive to general education classroom management practices. Additionally, for four other students whose behaviors did not improve under the use of these Tier 2 interventions, more individualized function-based Tier 3 interventions were effective in reducing their problem behaviors. Furthermore, teacher reports were positive, indicating that the interventions were easy to implement and improved the overall climate of their classrooms.

Conclusion

The RtI framework appears to be a helpful and relevant way to conceptualize the integration of universal screening, early intervention, and regular progress monitoring within a school- or district-wide system of service delivery. By combining universal screening with RtI principles we allow for proactive identification of children at-risk for emotional and behavioral problems and establish baseline data against which to compare the effects of interventions (Severson and Walker 2002). Through this process, we may avoid the development of more serious mental health difficulties and reduce the need for more intensive and expensive treatments (Gresham 2004). In Chapter 7, we will present another example of a screening system being utilized to implement an RtI-type model for emotional and behavioral problems. We hope that this example will bring to life both the strengths and the challenges of the implementation of such an approach in an authentic context.

References

- Atkins, M. E. (2008). Dissertation entitled Response to intervention: Incorporation of an increasing intensity design to improve mathematics fluency.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs: Prentice-Hall.
- Barnett, D. W., Elliott, N., Wolsing, L., Bunger, C. E., Haski, H., & McKissick, C., et al. (2006). Response to intervention for young children with extremely challenging behaviors: What it might look like. *School Psychology Review*, *35*, 568–582.
- Brown-Chidsey, R., & Steege, M. W. (2005). *Response to intervention: Principles and strategies for effective practice*. New York: The Guilford.
- Busk, P., & Serlin, R. (1992). Meta-analysis for single-case research. In T. Kratochwill & J. Levin (Eds.), *Single-case design and analysis* (pp. 187–212). Hillsdale: Lawrence Erlbaum.
- Chafouleas, S. M., McDougal, J. L., Riley-Tillman, T. C., Panahon, C. J., & Hilt, A. M. (2005). What do daily behavior report cards (DBRCs) measure? An initial comparison of DBRCs with direct observation for off-task behavior. *Psychology in the Schools*, *42*, 669–676.
- Cheney, D., Flower, A., & Templeton, T. (2008). Applying response to intervention metrics in the social domain for students at risk of developing emotional or behavioral disorders. *The Journal of Special Education*, *42*, 108–126.
- Colvin, G., Kame'enui, E. J., & Sugai, G. (1993). Schoolwide and classroom management: Reconceptualizing the integration and management of students with behavior problems in general education. *Education and Treatment of Children*, *16*, 361–381.
- Daly, E. J. III, Martens, B. K., Barnett, D., Witt, J. C., & Olson, S. C. (2007). Varying intervention delivery in response to intervention: Confronting and resolving challenges with measurement, instruction, and intensity. *School Psychology Review*, *36*, 562–581.
- Dowdy, E., Nylund-Gibson, K., Felix, E., Morovati, D., Carnazzo, K., & Dever, B. V. (2014). Long-term stability of screening for behavioral and emotional risk. *Educational and Psychological Measurement*, *74*(3), 453–472. doi:10.1177/0013164413513460.
- DuPaul, G. J., Power, T. J., Anastopoulos, A. D., & Reid, R. (1998). *ADHD Rating Scale-IV: Checklists, norms, and clinical interpretation*. New York: Guilford Press.
- Fairbanks, S., Sugai, G., Guardino, D., & Lathrop, M. (2007). Response to intervention: Examining classroom behavior support in second grade. *Council for Exceptional Children*, *73*, 288–310.
- Glover, T. A., & DiPerna, J. C. (2007). Service delivery for response to intervention: Core components and directions for future research. *School Psychology Review*, *36*, 526–540.
- Gresham, F. M. (2004). Current status and future directions of school-based behavioral interventions. *School Psychology Review*, *33*, 326–343.
- Gresham, F. M. (2005). Response to intervention: An alternative means of identifying students as emotionally disturbed. *Education and Treatment of Children*, *28*, 328–344.
- Gresham, F. M., & Lopez, M. F. (1996). Social validation: A unifying concept for school-based consultation research and practice. *School Psychology Quarterly*, *11*, 204–227.
- Harris-Murri, N., King, K., & Rostenberg, D. (2006). Reducing disproportionate minority representation in special education programs for students with emotional disturbances: Toward a culturally responsive response to intervention model. *Education and Treatment of Children*, *29*, 779–799.
- Hintze, J. M., & Matthews, W. J. (2004). The generalizability of systematic direct observations across time and setting: A preliminary investigation of the psychometrics of behavioral observations. *School Psychology Review*, *33*, 258–270.
- Individuals with Disabilities Education Improvement Act. (2004). 20 U.S.C. § 1400.
- Johnson, E. S., & Smith, L. (2008). Implementation of response to intervention at middle school: Challenges and potential benefits. *Council for Exceptional Children. Jan-Feb*, 46–52.
- Kamphaus, R. W., & Reynolds, C. R. (2007). *Behavior assessment system for children—Second Edition (BASC-2): Behavioral and emotional screening system (BESS)*. Bloomington: Pearson.
- Kazdin, A. E. (2003). Clinical Significance: Measuring whether interventions make a difference. In A. E. Kazdin (Ed.), *Methodological issues and strategies in clinical research* (3rd ed., pp. 691–710). Washington D.C.: American Psychological Association.

- Klingner, J. K., & Edwards, P. (2006). Cultural considerations with response-to-intervention models. *Reading Research Quarterly, 41*, 108–117.
- Marquez, B., Yeaton, P., & Vincent, C. (2013). Behavioral universal screening and progress monitoring with web-based technology. In H. M. Walker & F. M. Gresham (Eds.), *Handbook of evidence-based practices for emotional and behavioral disorders: Applications in schools* (pp. 192–210). New York: Guilford.
- No Child Left Behind (NCLB) Act of 2001. (2002). Pub. L. No. 107–110, § 115, Stat. 1425.
- Parisi, D. M., Ihlo, T., & Glover, T. A. (2014). Screening within a multitiered early prevention model: Using assessment to inform instruction and promote students' response to intervention. In R. J. Kettler, T. A. Glover, C. A. Albers, & K. A. Feeney-Kettler (Eds.), *Universal screening in educational settings: Evidence-based decision making for schools* (pp.19–46). Washington, DC: American Psychological Association.
- President's Commission on Excellence in Special Education. (2002). A new era: Revitalizing special education for children and their families. <http://www.ed.gov/inits/commissionsboards/wh-specialeducation/reports/pcesefinalreport.pdf>. Accessed 16 Sept 2008.
- Reynolds, C. R., & Kamphaus, R. W. (2004). *Behavior assessment system for children-Second Edition (BASC-2)*. Circle Pines: Pearson.
- Reynolds, C. R., & Kamphaus, R. W. (2009). *BASC-2 Progress Monitor*. Minneapolis: NCS Pearson.
- Riley-Tillman, T. C., Chafouleas, S. M., & Briesch, A. M. (2007). A school practitioner's guide to using daily behavior report cards to monitor student behavior. *Psychology in the Schools, 44*, 77–89.
- Salvia, J., & Ysseldyke, J. E. (2001). *Assessment* (8th ed.). Princeton: Houghton Mifflin.
- Severson, H. H., & Walker, H. M. (2002). Proactive approaches for identifying children at risk for sociobehavioral problems. In K. L. Lane, F. M. Gresham, & T. E. O'Shaughnessy (Eds.), *Interventions for Children with or At Risk for Emotional and Behavioral Disorders* (pp. 33–53). Boston: Allyn & Baco
- Severson, H. H., Walker, H. M., Hope-Doolittle, J., Kratochwill, T. R., & 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*, 193–223.
- Sugai, G., Horner, R. H., & Gresham, F. M. (2002). Behaviorally effective school environments. In M. Shinn, H. Walker & G. Stoner (Eds.), *Interventions for academic and behavior problems II* (pp. 315–350). Bethesda: National Association of School Psychologists.
- Walker, B. A. (2010). Effective schoolwide screening to identify students at risk for social and behavioral Problems. *Intervention in School and Clinic, 46*, 104–110.
- Walker, H. M., Small, J. W., Severson, H. H., Seeley, J. R., & Feil, E. G. (2014). Multiple-gating approaches in universal screening within school and community settings. In R. J. Kettler, T. A. Glover, C. A. Albers & K. A. Feeney-Kettler (Eds.), *Universal screening in educational settings: Evidence-based decision making for schools* (pp. 47–75). Washington, DC: American Psychological Association.