### 12

# Social Behavior Assessment and Response to Intervention

#### Christine Kerres Malecki and Michelle Kilpatrick Demaray

Christine Kerres Malecki, PhD, is an Associate Professor of Psychology at Northern Illinois University, DeKalb. cmalecki@niu.edu

Michelle Kilpatrick Demaray, PhD, is an Associate Professor of Psychology at Northern Illinois University, DeKalb. mkdemaray@niu.edu

This chapter presents information on assessment strategies for social behaviors in schools that may be used in a problem-solving approach that incorporates response to intervention (RTI). As a point of communication, although many associate RTI solely as a method for identifying and qualifying students for special education services, this chapter discusses RTI within the context of a problem-solving approach. The "interventions" in RTI can be thought of as general education curriculum and instruction, interventions for students at risk of academic or behavior problems, or interventions that are intense enough to warrant special education funding. Thus, this chapter does not focus solely on RTI as an eligibility tool. The importance of the assessment of social behaviors in a problem-solving or RTI approach will be presented along with a detailed description of specific measures and example applications. The use of RTI with social behaviors will also be critiqued, along with suggestions for future directions for the field.

#### 12.1 Importance

Educators are continually struggling with the increasing number of students that have academic or behavioral difficulties, or both, in the classroom. For example, there are an increasing number of children being served in special education programs for children with emotional disturbance (US Department of Education, National Center for Education Statistics, 2003). Researchers have reported a

high prevalence of bullying behavior in US schools, with 15 to 20% of students reporting being regular victims of bullying behavior (Batsche and Knoff, 1994). Social behavior problems in schools, unfortunately, also include serious crimes and offenses. For example, according to the US Department of Education, National Center for Education Statistics (2004), in 1999-2000, 20% of public schools reported at least one violent crime (e.g., rape, assault), 71% reported violent incidents, and 46% reported thefts. Not only are externalizing behaviors of concern, but students may also experience high rates of internalizing disorders, such as depression and anxiety. Prevalence rates of depression in children and adolescents range from 20 to 55% (Diekstra and Garnefski, 1995). As the number of students with emotional or behavioral difficulties continues to rise, this creates challenges for educators in dealing with these behaviors. Schools are forced to address these increasing social behavior challenges in order to educate children. Too often, the approaches within schools to address behavior problems are reactive and do not emphasize a proactive or preventative component. Ideally, schools would utilize a more preventative approach based on evidencebased interventions (Deno, 2005). Using a problemsolving model in schools to prevent problem behavior and academic difficulties is crucial. If schools only focus on intervening when problems are severe, then they will be doing a great disservice to the students they are serving (Shinn, 2005).

School psychologists are well positioned in the schools to advocate, and in some contexts provide

leadership for, a proactive and preventative approach to social behavior problems in schools. They have the knowledge and skills that allow them to design, implement, and evaluate interventions aimed at prevention and behavior change (Gresham, 2004). Future directions for school-based intervention models will be based on evidence-based intervention practices and response to intervention in a problem-solving model (Gresham, 2004). Thus, it is important for educators and school psychologists to have the knowledge and skills to prevent or intervene with social behavior problems. This requires educators to utilize knowledge from the literature on evidence-based intervention, RTI, and problem-solving.

#### 12.2 Historical Need/Use

Many components or aspects of RTI have been utilized in schools in the past; however, they have not been conceptualized as part of a larger model or system (Brown-Chidsey and Steege, 2005). Prior models of identifying students in need of services in schools have had many problems, such as lacking prevention efforts, relying on one-time assessments, and assuming that deficits are within the student (Barnett, Daly, Jones, and Lentz, 2004; Brown-Chidsey and Steege, 2005; Gresham, 2004). Brown-Chidsey (2005) describes the two main components of RTI that distinguish it from other practices are that it is systematic and data based. Thus, a large part of the RTI process involves assessments that are both systematic and data based. This chapter details these assessments for social behavior problems in schools. The RTI model has more of a preventative focus as opposed to traditional models, where educators wait for referrals of children or adolescents who are failing or severely struggling in school. Within the RTI model, educational professionals proactively monitor and screen for various academic and social behaviors. Based on those assessment data, interventions are provided that match the students' needs. Much more has been written about proactively screening and monitoring important academic outcomes, such as reading. However, there is clearly also a need to screen and provide interventions for important social behaviors in the schools (Crone and Horner, 2003).

# 12.3 Three-Tiered Model of Intervention

Researchers have discussed the importance of identifying and intervening with students based on the level of symptom severity and need. Given the context of social behaviors in schools, first one must identify children that are typically developing and not at risk for various social behavior problems. Ideally, at least 80 to 85% of students would be functioning in a typical (nonproblematic) range of behavior at this level (Walker and Shinn, 2002). Next, one must identify those children and adolescents that are at risk for developing social behavior problems and those that are currently exhibiting social behavior problems. Given the large domain of social behavior, this task may seem overwhelming to some educational professionals. It may be difficult for school personnel to know what specific social behaviors to focus on for prevention/intervention. The list of social behavior problems that may be affecting children in schools today is large. This could include bullying, drug and alcohol use, poor social skills, depression, skipping school, and anxiety. See Table 12.1 for a list of some of the many social

TABLE 12.1. List of possible social behaviors for schools to target for prevention/intervention.

Affective problems Depression

Anxiety

Self-esteem/self-concept

Externalizing problems

Aggression

Bullying

School violence

Conduct problems

Hyperactivity

Truancy

Social/relationship behaviors

Peer relationships

Social Skills

Prosocial behaviors

Risky behaviors

Alcohol and drug use

Smoking

Sexual behaviors

Health behaviors

School factors/positive behaviors

School climate

Social support

Resiliency (risk and protective factors)

#### Model/Framework

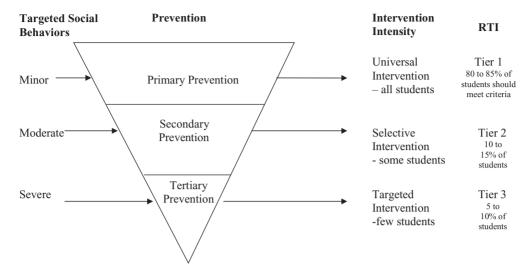


FIGURE 12.1. Relationships among severity of targeted social behavior, prevention framework, intervention intensity framework, and RTI.

behaviors that schools may potentially focus on as target behaviors in an RTI model.

Figure 12.1 depicts the three levels of severity for social problems that children and adolescents may be exhibiting. Granted, children and adolescents who are already exhibiting social behavior problems are going to have more negative outcomes associated with their difficulties than children at risk or not exhibiting a specific social behavior problem. Children exhibiting different levels of behavior problems require different levels of intervention (e.g., intensity, complexity, expense) due to the severity of their problems or their responsiveness to prevention/intervention strategies (Gresham, 2004; Walker and Shinn, 2002). These levels of intervention are primary, secondary, and tertiary prevention. Primary prevention programs (i.e., universal interventions) focus on the entire school and may be focused on building protective factors, increasing resilience, or preventing social behavior problems from starting in the first place. Basically, at the primary prevention level one is trying to prevent social behavior problems from beginning and to achieve or maintain the 80 to 85% benchmark for the behavior of interest. Secondary prevention programs (i.e., selective interventions) focus on providing interventions to students that are at risk for social behavior

problems. These interventions are typically used to target at-risk students and are often carried out in small groups. Interventions at the third level, tertiary (i.e., targeted intervention), are used to address the needs of children already displaying social behavior problems and are much more intensive and typically individual in focus (Walker and Shinn, 2002).

It is assumed that, within the three-tiered approach to service delivery, all of the requisite problem-solving steps would be used. Although the steps are often numbered differently or labeled differently, the basic tenets include problem identification, problem analysis, intervention development, intervention implementation, and intervention evaluation (Tilly, 2002). In this chapter, it should be assumed that the assessment techniques being discussed would be tailored to the purpose called for within each of these five steps. For example, for intervention evaluation (progress monitoring) purposes, the assessment technique would need to be able to be given repeatedly and reliably over time and would need to be sensitive to change. If a team is determining whether or not a child is eligible for and needs interventions that are intensive enough to warrant special education funding, then the data collected and or reviewed would need to be appropriate for making that eligibility determination. Although the steps of the problem-solving process may not be referred to specifically throughout the chapter, this "fit the assessment to its appropriate purpose" philosophy should be assumed.

# 12.4 Assessment Approaches Within the Three Tiers

One assumption of the authors is that all assessment methodology within a problem-solving model would take a functional behavior assessment (FBA) approach. In order to conserve space, the remainder of the chapter will focus on the general assessment techniques that might fit within a three-tier assessment/intervention approach, but it should be assumed that, especially at the higher tiers, school personnel would be using FBA as their orientation in approaching behavioral assessment.

Just as the intensity of interventions increases as student needs increase from Tier 1 to Tier 3, the "intensity" of assessment also increases. As stated by Grimes and Kurns (2003, p. 14), "Assessment data are gathered at all levels of the problem solving process, but the breadth and depth of these data increase as the needs become more intensive." One framework that is helpful for educators to guide assessment practices is the review, interview, observe, test (RIOT) approach (Heartland Area Education Agency, 2003). Descriptions and examples of each of the RIOT domains are described below.

If RIOT is followed in assessment approaches. the breadth of assessment data would refer to multiple methods and multiple sources, with data first being gathered via review, interview, and observations. If more information is needed (more breadth and depth needed), then one may move to the most "intrusive" method of assessment by gathering new data via "testing." The idea is to test (typically involving time one-on-one with the student) only if necessary. Testing in the RIOT approach does not just refer to tests per se, but refers to methodologies that gather new data in a way that involves the student or gathering data systematically from others (e.g., experimental intervention piloting, gathering rating-scale data from the student, teacher, or parent). The following sections describe how data on social behaviors can be collected via the RIOT approach in a three-tiered model of service delivery (Table 12.2).

#### 12.4.1 Review for Tier 1

School staff can identify first whether they can simply gather existing data via "review." Are the data available in students' cumulative records, teachers' gradebooks, or behavioral referral databases? If so, this data would be the first to collect, organize, and analyze. Several types of important behavioral data may be found in students' cumulative files (National Center for Education Statistics, 1997). Attendance rates could be aggregated by grade level or other meaningful demographics (e.g., special education status, if students are receiving after-school programming). School staff can use these data to determine what the local norms are regarding attendance and use those data in conjunction with staff expectations for students' attendance. Is there a mismatch between local norms and teacher expectations? Are 85% of students attending school at an acceptable rate?

Collecting behavioral referral data can also be very informative (Crone and Horner, 2003; National Center for Education Statistics, 1997). How many students are being referred to the office for behavioral issues each week, each semester, or each year? Are the levels of behavioral referrals acceptable? Staff could also organize the data by behavioral offense if that information is available. For example, perhaps most of the students are referred due to dress code violations. These initial data may lead to hypotheses for changes at Tier 1, such as a revised dress code, better communication about the dress code, or a reward system for students consistently following the dress code. The methods of analyzing the last year or two of office referral data and using those data to make decisions (an ideal Tier 1 review assessment) are described in the work of the researchers behind Positive Behavioral Interventions and Supports (PBIS) (e.g., Sugai, Sprague, Horner, and Walker, 2000; Crone and Horner, 2003).

#### 12.4.2 Review for Tiers 2 and 3

Reviewing for Tiers 2 and 3 would involve examining data for individual students more closely. Rather than reviewing existing products to develop normative data or to screen for problems, the review would take place to facilitate problem analysis and hypothesis development (Tilly, 2002). For example, personnel could examine a middle-school student's assignment completion rates across all of their class

TABLE 12.2. Summary table to guide implementation of assessment for social behaviors with RTI.

Question to answer	Assessments to use	Considerations	Purpose of assessment
What is the target behavior?	Choose appropriate target social behavior(s)	The target behavior must be clearly and operationally defined	To choose an appropriate target behavior for prevention/intervention based on school need or goals
What are the current levels of this behavior? Are 80 to 90% of students succeeding in this area at Tier 1?	Conduct Tier 1 assessment with review, interview, observe, and/or test	Tier 1 assessments should be easy to collect on entire school population	To understand the current levels of the target social behavior in the school, to create normative data or benchmark criteria
Implement Tier 1 universal in	terventions school-wide and con	tinue data collection.	
Assess at-risk students for por	tential Tier 2 interventions.		
Do <i>some</i> children need more intensive intervention (Tier 2)?	Conduct Tier 2 assessment with review, interview, observe, and/or test	Tier 2 assessments should provide information to aid problem analysis and intervention development	To determine how to develop interventions for children that are not responding to Tier 1 interventions
Are the interventions being implemented effective (at Tier 2)?	Conduct Tier 2 assessment with primarily observe & test	Data collected to monitor Tier 2 interventions should be able to be gathered repeatedly and reliably	To determine students' response to intervention at Tier 2
Are the Tier 1 interventions being implemented effective?	Conduct Tier 1 screening assessment with review, interview, observe, and/or test	Tier 1 assessments should be easy to collect on entire school population	To monitor the levels of the target social behavior in the school and compare against previously identified benchmark criteria
Continue Tier 1 universal inte Implement and progress moni Identify and develop interven	itor Tier 2 interventions.	ssary changes and continue data co	llection.
Do a few children need more intensive intervention?	Conduct Tier 3 assessment with review, interview, observe, and/or test	Tier 3 assessments should provide information to aid problem analysis and intervention development	To determine children that did not respond to Tier 2 interventions and are in need of more intensive interventions
Are the interventions being implemented effective (at Tier 3)?	Conduct Tier 3 assessment with primarily observe & test	Data collected to monitor Tier 3 interventions should be able to be gathered repeatedly and reliably	To determine students' response to intervention at Tier 2

periods. Is the problem occurring in some classes more than others? Is there a pattern of not turning work in on certain days (e.g., Mondays, or on days when work was taken home as opposed to completed in class?). As mentioned above, the purposes of Tier 2 and 3 assessments are to be more diagnostic; that is, to identify the conditions under which the student is successful and not successful. This information can then be used for developing interventions for groups of students or individuals, for evaluating the effectiveness of those interventions, and potentially to determine eligibility for special education services (Gresham, 2005). Reviewing

data is appropriate at every level of the service delivery model.

### 12.4.3 Interviewing and Observing for Tier 1

Interviewing and observing every child in a school for Tier 1 purposes would be inefficient, if not impossible. However, gathering staff interviews can be helpful for anecdotal information about a target concern. Select parent and student interviews may also help provide a direction if more information is needed before doing more Tier 1 assessment; for example, to narrow down the scope of a target behavior. Similarly, conducting school-wide observations to gather universal data is impractical. However, choosing a random classroom at each grade level and conducting observations during a common time (e.g., observing reading instruction) may provide useful data. For example, many teachers refer students for poor peer relations. However, teachers and school staff may not have local peer comparison data for that social behavior. Observing random recess times and gathering systematic data on the number of peer interactions typically occurring on the playground would provide useful data that may be used for comparison or goal setting (particularly in Tiers 2 and 3). Additionally, these data could be used to determine whether more students than expected have poor peer relationships, thus leading to a Tier 1 intervention.

### 12.4.4 Interviewing and Observing for Tiers 2 and 3

As part of the problem analysis and intervention development steps of problem solving, gathering data via interviews (e.g., student, parent, and teachers) and via observations of the target behavior in context can be crucial. Most interviews conducted within a problem-solving framework are more behavioral in nature and are critical in conducting a functional assessment of behavior (Busse and Beaver, 2000). Furthermore, doing structured, formal observations of the student in context provide more data to develop hypotheses that will lead to intervention development.

There are several types of interview (e.g., traditional techniques, behavioral interviews, and structured or semi-structured interviews) and several types of observation (e.g., naturalistic observation, analogue observation, self-monitoring), all of which are documented in detail in many resources (e.g., Merrell, 2003; Sattler and Hoge, 2006). More important for the context of the current chapter is to discuss how interviews and observations generally fit into the RTI approach.

First, interviews and observations should be focused on the target behavior rather than being general and comprehensive. Furthermore, these methods should be used to help develop or confirm hypotheses generated as part of problem analyses. Finally, data from observations should be collected

systematically, as those data may be used as baseline data in the intervention evaluation step of the problem-solving process (Tilly, 2002).

Ecological data may also be gathered via interviews and observations. Important questions include: Is there a mismatch in the curriculum being used and the student's instructional level? Is the classroom environment conducive to that student's learning? Is instructional pace appropriate for the target student? These questions can be answered via review (e.g., of the curriculum), interview (e.g., teacher, student, parent), and observation (e.g., classroom instruction, environment).

Another methodology that fits within interview and observation is teacher referral. To screen at Tier 1 for various social behavior concerns, all teachers could be requested to identify children in their classrooms that they are concerned about regarding a particular social behavior (e.g., peer relationship problems, inattention, poor classroom behavior, depression). The accuracy of teachers' judgments surrounding academic behaviors has been documented by research (Demaray and Elliott, 2001; Gresham, MacMillan, and Bocian, 1997; Hoge and Coladarci, 1989); however, several cautions have also been discussed (Feil, Severson, and Walker, 2002). Although much more research needs to be conducted on the validity of teacher identification of social behavior problems, relying on teacher identification of children in need of intervention at Tier 1 may be a very realistic methodology for schools with limited resources.

#### 12.4.5 Testing at All Tiers

As part of the RIOT process, school psychologists may need to employ various "tests" or tools in order to collect additional data to inform decisions at each of the three tiers. These may be for screening, diagnostic, progress-monitoring, or eligibility purposes. These various tools will be briefly reviewed below.

#### 12.4.5.1 Rating Scales

While there are numerous methods to collect new data (e.g., sociometric analyses, goal attainment scaling), the use of rating-scale screening methodology is probably the most efficient "testing" method for social behaviors. The rating scales used on a school-wide basis (Tier 1) need to be relatively brief, easy to score, and cost effective. Ratings scales can be used to assess students' social behavior in a number of domains, including bullying, depression, alcohol and drug use, gang involvement, social skills, anxiety, externalizing behavior, attention problems, and social support. At Tiers 2 and 3, more comprehensive rating scales may be used. For example, the child behavior checklist (Achenbach and Rescorla, 2001) and the behavioral assessment system for children (Reynolds and Kamphaus, 2004) are commonly used broad-band measures for the assessment of a wide variety of social and emotional problems in children and are often used in the determination of eligibility for services. These comprehensive ratings scales have their limitations for use at Tiers 2 and 3. For example, they are not designed to be used frequently and repeatedly to track the effect of interventions; they frequently focus on negative behaviors, are time intensive, and are based on the reporters' perceptions.

There are also narrow-band rating scales that can assess a particular targeted behavior. For example, screening for problems at a school-wide level (Tier 1) could be done using brief narrow-band measures such as the Reynolds child depression scale (Reynolds, 1989) for depression, the child and adolescent social support scale (Malecki, Demaray, and Elliott, 2000) for social support, and the social skills rating system (Gresham and Elliott, 1990). The ADHD-IV rating scale (DuPaul, Power, Anastspoulos, and Reid, 1998) and the BASC ADHD monitor (Kamphaus and Reynolds, 1998) are both brief measures that can be used to assess and monitor intervention effectiveness for symptoms of ADHD. These measures average around 10 to 15 min to administer (some can be collected from multiple informants) and can be scored quickly. They have been found to be valid and reliable measures of their stated constructs. There are a wide variety of other behavior rating scales available across various domains of behavior (Merrell, 2003). It is important to note that, although they are relatively brief, schools may not have the resources to purchase, administer, and score these measures. In addition, some of these measures may not be ideal for progress monitoring behavior change.

#### 12.4.5.2 Self-Monitoring

In a self-monitoring assessment a child or adolescent records specific target behaviors and may include monitoring circumstances surrounding that behavior (Sattler, 2002). An advantage of selfmonitoring is that it may also serve as an intervention to change the targeted social behavior (Reid, 1996). Another advantage is that children can monitor internal thoughts and feelings as well as overt behaviors (Merrell, 2003). Some concerns around self-monitoring include training children and adolescents to properly conduct self-monitoring, the accuracy of self-monitoring, and limited reliability and validity. An excellent review of the literature and a guide to using self-monitoring is provided in Shapiro, Durnan, Post, and Levinson (2002). Selfmonitoring could be used both as part of an intervention and to monitor intervention effectiveness at Tiers 2 and 3. Given the cautions around the accuracy of self-monitoring (Shapiro et al., 2002), selfmonitoring data would need to be used along with several types of convergent data if part of an eligibility decision.

## 12.4.5.3 Goal Attainment Scaling and Daily Behavior Report Cards

Two similar methods of rating behavior can be used as progress monitoring tools in a problem-solving approach: goal attainment scaling (GAS; Roach and Elliott, 2005) and daily behavior report cards (DBRCs; Chafouleas, McDougal, Riley-Tillman, Panahon, and Hilt, 2005). GAS ratings involve (a) identifying the target behavior, (b) operationalizing the behavior in objective, measurable terms, and (c) creating three to five operational descriptions of the behavior ranging from the criterion (e.g., 100% immediate compliance to teacher requests) to the least favorable outcome (e.g., 0 to 10% immediate compliance to teacher requests). The numeric indicators for each of the descriptions typically range from "+2," representing the most favorable description, to "-2," representing the least desirable description, and "0," representing the description of the baseline level of the behavior (Albers, Elliott, Kettler, and Roach, 2005).

DBRCs are very similar to GAS. They are developed very similarly by identifying a target behavior, creating operational descriptions of various levels of that behavior ranging from least to most desirable, and assigning numeric values to each descriptor (Chafouleas et al., 2005). Chafouleas et al. compared DBRC data with direct observations and

found that there is a moderate association between DBRC ratings and direct observations of behavior. Future research is warranted on the use of GAS and DBRC data collection methods, as they may be very useful tools to monitor progress associated with interventions at Tier 2 and Tier 3. One caution is that the GAS and DBRC operational descriptors need to be developed very carefully by a school psychologist or other professional trained to create behavioral, observable, and measurable behavioral descriptors.

#### 12.4.5.4 Direct Observation

Using direct observation techniques would also add to the convergent data necessary when making decisions within a problem-solving or RTI model. Frequency recording, duration recording, latency recording, interval recording, antecedent, behavior, and consequence (ABC) recordings, (Albers et al., 2005) can all be used at Tiers 2 and 3 to monitor progress and to help determine peer comparison data to help in making eligibility decisions. The direct observation data can be crucial in helping confirm or provide convergent evidence of the GAS or DBRC ratings described above.

# 12.4.5.5 Treatment Acceptability and Treatment Integrity

An important consideration in gathering new assessment data within the three-tier model of service delivery is to monitor the acceptability and integrity of the interventions being implemented at all three levels of intervention. If progress monitoring is planned and conducted perfectly, then the data will still be meaningless if the intervention is not carried out as planned. At least two factors may influence this: treatment acceptability and treatment integrity (Elliott, Witt, Kratochwill, and Stoiber, 2002). For example, knowing a teacher's perceptions of an intervention in terms of the time it will take, how intrusive it is, and how positive (versus punitive) the intervention is can all affect treatment acceptability (Albers et al., 2005). An intervention will be more likely to be implemented with integrity when it is time efficient, simple, requires minimal resources and staff, if staff are highly motivated, and if it is perceived as effective (Albers et al., 2005). Thus, collecting acceptability and integrity data should always be considered as part of intervention development and evaluation in a problem-solving approach.

#### 12.5 An Example: Bullying

Perhaps a school administrator noticed that they had experienced increased complaints about bullying in their school but they were not sure of the significance of the issue in their building. As a Tier 1 assessment approach, the administrator might elicit teacher feedback via informal interviews and teacher referrals. Additionally, a school may use one of several rating scales that were developed to measure bullying behavior that may be appropriate for school-wide screening. The Reynolds Bully Victimization Scale (Reynolds, 2003) is a 46-item rating scale (23 assess being bullied and 23 assess being the aggressor) that assesses the frequency of experiencing various aggressive behaviors at school. The Olweus Bully/Victim Questionnaire (Olweus, 2004) provides a lengthy definition of bullying and asks students to answer questions about their experiences of bullying behavior. The Bully Survey (Swearer, 2001) provides a very brief definition of bullying to students and then asks questions about the frequency of bullying, and reasons why students think they are bullied. Furlong and Greif (2006) provide a contemporary review of bullying measures that may provide further direction in choosing measures of bullying. These rating scales would be appropriate for Tier 1 screening, as it is feasible for all students in the school to complete them to provide data on levels of bullying in the school. Again, schools with limited resources may not have the means to collect and analyze this data. It may require a staff person in charge of data collection and analysis or collaboration with a local university.

If a problem was identified, then a committee could be developed to gather more information about the nature of the problems and develop a universal intervention plan. In the meantime, groups of students could be identified for more selective intervention. This could involve working with small groups of children that were identified through the screening as being frequently targeted for bullying. Further interviews could be done with those students as a Tier 2 assessment approach to do problem analysis and intervention development. Perhaps it is

identified that, for many of the students who have been victimized, they need help in learning how to effectively respond to bullying when it happens to them. Educational professionals often target bullies for intervention and prevention by creating notolerance rules, trying to create a culture that does not accept bullying behavior; however, educators may fall short when it comes to providing victims of bullying with appropriate levels of intervention. Thus, along with anti-bullying interventions, interventions could also focus on the victims. This could consist of a series of small group informational skillbuilding interventions. These students would be followed via progress monitoring using an appropriate rating scale, a GAS or a self-monitoring procedure (how often were they bullied, and if they were, did they respond using the skills they were being taught, what help do they need). Additionally, of course, problem solving is a cyclical process. The universal intervention in place would need to be monitored, new students targeted for Tier 2 interventions, those students monitored, and, finally, potentially identified for more intensive Tier 3 interventions if necessary.

#### 12.6 Limitations and Concerns

The idea of screening and implementing prevention and intervention strategies in schools for social behavior problems in an RTI model also creates some concerns and roadblocks. First, many schools are so busy "putting out fires" and dealing with dayto-day issues that it is often difficult to communicate the wisdom of prevention. As stated by Walker and Shinn (2002, p. 4), "it is not just a question of knowing what to do but, rather, of whether we are aware of what we need to do, and whether we are willing to do it." There are evidence-based interventions and prevention programs that have been shown to be effective for addressing various social and behavioral problems. It is just a matter of developing systems to be certain they get implemented in a comprehensive, systematic, and appropriate manner. Part of the difficulty for schools in implementing the screening and intervention/prevention efforts is a lack of available resources. The task of screening the entire school for benchmark data and to identify children who need higher levels of intervention may be overwhelming. First, the schools have to have the necessary resources for screening, staff to implement, score, systematically analyze, and interpret. An additional problem for many schools is what to do with the children they identify as needing more intensive intervention, especially in high-risk schools where they many identify numerous social and behavioral problems among their student population. Schools will need resources to implement prevention and intervention programs. Particularly for prevention programs, money can be difficult to secure to solve "problems that do not yet exist." However, given the emphasis on evidence-based interventions, the growing number of endorsed programs, and the reauthorization of IDEA (2004), including resource provision to prevention and intervention in general education, there may be support to be found. Additionally, strong leadership within a school or district and staff commitment to implement would be crucial.

# 12.7 Future Directions and Conclusions

In academic domains, the three-tier model has a great deal of research and support, particularly in the area of reading (Grimes and Kurns, 2003; National Institute of Child Health and Human Development, 2000). National benchmarks have been identified using early literacy skills and oral reading fluency that inform educational professionals regarding whether young children are on track to be successful readers. However, such benchmarks do not currently exist in the vast area of social behavior. One future direction will be to identify "benchmarks" for certain social behaviors that schools can use as they conduct Tier 1 screening. These data may be there, but a comprehensive meta-analysis of the existing empirical literature may help in the area of social behavior as it has for reading (National Institute of Child Health and Human Development, 2000).

Although educators may find the task of implementing a three-tiered approach to addressing social behavior needs daunting, it is a worthy pursuit. The amount of time and school resources used to assess, intervene, and progress monitor social behaviors increases along with the level of intensity of the target behavior. Therefore, if schools take a

preventative approach, beginning with Tier 1 assessment and intervention procedures, then it is anticipated that there would be a savings of both time and resources by catching problems early or before they even begin and grow in intensity and need. Additionally, research has shown repeatedly that positive behavior is related to positive academic achievement (e.g., Malecki and Elliott, 2002; Wentzel, 1993). Thus, spending resources in creating a preventative framework for behavior may also have positive results for academics. Hopefully, a continuing empirical research base will help provide more specific guidelines in implementing a three-tiered model of service delivery for social behaviors in the schools.

#### References

- Achenbach, T. M. & Rescorla, L. A. (2001). Manual for the ASEBA School-Age Forms & Profiles. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.
- Albers, C. A., Elliott, S. N., Kettler, R. J., & Roach, A. T. (2005). Evaluating intervention outcomes. In R. Brown-Chidsey (Ed.), Assessment for Intervention: A Problem-Solving Approach (pp. 329–351). New York: Guilford Press.
- Barnett, D. W., Daly, E. J., Jones, K. M., & Lentz Jr., F. E., (2004). Empirically based special service decisions from single-case designs of increasing and decreasing intensity. *The Journal of Special Education*, 38, 66– 79.
- Batsche, G. M. & Knoff, H. M. (1994). Bullies and their victims: understanding a pervasive problem in the schools. *School Psychology Review*, 23, 165–174.
- Brown-Chidsey, R. (Ed.). (2005). Assessment for Intervention: A Problem-Solving Approach. New York: The Guilford Press.
- Brown-Chidsey, R. & Steege, M. W. (2005). *Response to Intervention: Principles and Strategies for Effective Practice*. New York: The Guilford Press.
- Busse, R. T. & Beaver, B. R. (2000). Informant reports: parent and teacher interviews. In E. S. Shapiro & T. R. Kratochwill (Eds.), *Conducting School-Based Assessment of Child and Adolescent Behavior.* (pp. 235–273). New York: Guilford Press.
- 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.

- Crone, D. A. & Horner, R. H. (2003). Building Positive Behavior Support Systems in Schools. New York: The Guilford Press.
- Demaray, M. K. & Elliott, S. N. (2001). Teachers' judgments of students' academic functioning: a comparison of actual and predicted performances. *School Psychology Quarterly*, 13, 8–24.
- Deno, S. L. (2005). Problem-solving assessment. In R. Brown-Chidsey (Ed.), Assessment for Intervention: A Problem-Solving Approach (pp. 10–30). New York: Guilford Press.
- Diekstra, R. F. & Garnefski, N. (1995). On the nature, magnitude and causality of suicidal behaviors: an international perspective. Suicide and Life-Threatening Behavior, 25, 36–57.
- DuPaul, G.J., Power, T. J., Anastspoulos, A.D., & Reid, R. (1998). ADHD-IV Rating Scale IV. New York: Guilford Press.
- Elliott, S. N., Witt, J. C., Kratochwill, T. R., & Stoiber, K. C. (2002). Selecting and evaluating classroom interventions. In M. R. Shinn, H. M. Walker, & G. Stoner (Eds.), *Interventions for Academic and Behavior Problems II: Preventative and Remedial Approaches* (pp. 243–294). Bethesda, MD: The National Association of School Psychologists Publications.
- Feil, E. G., Severson, H. H., & Walker, H. M. (2002).
  Early screening and intervention to prevent the development of aggressive, destructive behavior patterns among at-risk children. In M. R. Shinn, H. M. Walker, & G. Stoner (Eds.), *Interventions for Academic and Behavior Problems II: Preventative and Remedial Approaches* (pp. 143–166). Bethesda, MD: The National Association of School Psychologists Publications.
- Greif, J. L. & Furlong, M. J. (2006). The assessment of school bullying: using theory to inform practice. *Journal of School Violence*, *5*, 33–50.
- Gresham, F. M. (2004). Current status and future directions of school-based behavioral interventions, *School Psychology Review*, 33, 326–343.
- Gresham, F. M. & Elliott, S. N. (1990). Social Skills Rating System. Circle Pines: AGS.
- Gresham, F. M., MacMillan, D. L., Bocian, K. M. (1997). Teachers as "Tests": Differential validity of teacher judgments in identifying students at-risk for learning difficulties. School Psychology Review, 26, 47– 60.
- Gresham, F. M. (2005). Response to intervention (RTI): an alternative means of identifying students as emotionally disturbed. *Education and Treatment of Children*, 28, 328–344.
- Grimes, J. & Kurns, S. (2003). An intervention-based system for addressing NCLB and IDEA expectations: a multiple tiered model to ensure every child learns.

- Paper presented at the *National Research Center on Learning Disabilities Responsiveness-to-Intervention Symposium*, Kansas City, MO.
- Heartland Area Education Agency (2003). Program Manual for Special Education. Johnston, IA: Heartland Area Education Agency.
- Hoge, R. D. & Coladarci, T. (1989). Teacher-based judgments of academic achievement: a review of the literature. Review of Educational Research, 59, 297–313.
- Kamphaus, R. W. & Reynolds, C. R., (1998). Behavior Assessment System for Children (BASC) ADHD Monitor. Circle Pines, MN: American Guidance Service.
- Malecki, C. K., Demaray, M. K., & Elliott, S. N. (2000). The Child and Adolescent Social Support Scale. DeKalb, IL: Northern Illinois University.
- Malecki, C. K. & Elliott, S. N. (2002). Children's social behaviors as predictors of academic achievement: a longitudinal analysis. *School Psychology Quarterly*, 17, 1–17.
- Merrell, K. W. (2003). *Behavioral, Social, and Emotional Assessment of Children and Adolescents*. Mahway, NJ: Lawrence Erlbaum Associates.
- National Center for Education Statistics (1997). Basic Data Elements for Elementary and Secondary Education Information Systems. Washington, DC: US Department of Education.
- National Institute of Child Health and Human Development (2000). Report of the National Reading Panel. Teaching Children to Read: An Evidence-based Assessment of the Scientific Research Literature on Reading and its Implications for Reading Instruction (NIH Publication No. 00-4769). Washington, DC: US Government Printing Office.
- Olweus, D. (2004). *The Olweus Bully/Victim Question-naire*. Bergen, Norway: Olweus.
- Reid, R. (1996). Research in self-monitoring with students with learning disabilities: the present, the prospects, the pitfalls. *Journal of Learning Disabilities*, 29, 317–322.
- Reynolds, C. R. & Kamphaus, R. W. (2004). Behavior Assessment System for Children (2nd ed.). Circle Pines, MN: American Guidance Service.
- Reynolds, W. (2003). Reynolds Bully Victimization Scales. San Antonio, TX: The Psychological Corporation, Harcourt Assessment.
- Reynolds, W. M. (1989). Reynolds Child Depression Scale. Odessa, FL: Psychological Assessment Resources.
- Roach, A.T. & Elliott, S.N. (2005). Goal attainment scaling: An efficient and effective approach to monitoring

- student progress. *Teaching Exceptional Children, 37* (4), 8–17.
- Sattler, J. M. (2002). Assessment of Children. Behavioral and Clinical Applications (4th ed.). San Diego, CA: Jerome M. Sattler.
- Sattler, J. M. & Hoge, R. D. (2006). Assessment of Children: Behavioral, Social, and Clinical Foundations (5th ed.). San Diego, CA: Jerome M. Sattler.
- Shapiro, E. S., Duman, S. L., Post, E. E., & Levinson, T. S. (2002). Self-Monitoring procedures for children and adolescents. In M. R. Shinn, H. M. Walker, & G. Stoner (Eds.), *Interventions for Academic and Behavior Problems II: Preventative and Remedial Approaches* (pp. 433–454). Bethesda, MD: The National Association of School Psychologists Publications.
- Shinn, M. R. (2005). Identifying and validating academic problems in a problem-solving model. In R. Brown-Chidsey (Ed.), Assessment for Intervention: A Problem-Solving Approach (pp. 219–246). New York: Guilford Press.
- Sugai, G., Sprague, J. R., Horner, R. H., & Walker, H. M. (2000). Preventing school violence. The use of office discipline referrals to assess and monitor school-wide discipline interventions. *Journal of Emotional and Behavioral Disorders*, 8, 94–101.
- Swearer, S. M. (2001). *The Bully Survey*. Unpublished manuscript, The University of Nebraska–Lincoln.
- Tilly, W. D. (2002). Best practices in school psychology as a problem solving enterprise. In A. Thomas & J. Grimes (Eds.), *Best Practices in School Psychology IV* (pp. 21–36). Bethesda, MD: The National Association of School Psychologists Publications.
- US Department of Education, National Center for Education Statistics (2003). *Digest of Education Statistics*, 2003 (NCES 2005-025), Chapter 2.
- US Department of Education, National Center for Education Statistics (2004). *Indicators of School Crime and Safety*, 2004 (NCES 2005–002), Table 3.1.
- Walker, H. M. & Shinn, M. R. (2002). Structuring school-based interventions to achieve integrated primary, secondary, and tertiary prevention goals for safe and effective schools. In M. R. Shinn, H. M. Walker, & G. Stoner (Eds.), Interventions for Academic and Behavior Problems II: Preventative and Remedial Approaches (pp. 1–25). Bethesda, MD: The National Association of School Psychologists Publications.
- Wentzel, K. R. (1993). Does being good make the grade? Social behavior and academic competence in middle school. *Journal of Educational Psychology*, 85, 357– 364.