

Considerations in Applying Empirically-based Assessment Practices to Support Children with Autism Spectrum Disorder and Co-Occurring Emotional Disorders in Inclusive Settings

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INTRODUCTION & BACKGROUND

Participation in inclusive settings for children with autism spectrum disorder (ASD) has been associated with positive outcomes in the areas of socialization, community integration, employment, and personal well-being (see Ferraioli & Harris, 2011). However, approximately 40% of school-aged children with ASD are diagnosed with one or more emotional disorders (ED) including anxiety disorders and depression (e.g., VanSteensel et al., 2011). Often, behavior problems co-occur with ED including aggression, tantrums, and argumentativeness and defiance/noncompliance (e.g., Matson & Nebel-Schwalm, 2007). In addition to ASD related impairments, the presence of an ED, particularly with a behavior problem or problems, can adversely affect the student's ability to participate and benefit from participation in an inclusive setting. Moreover, untreated ED has long-term implications for personal well-being and prognosis (e.g., Peacock et al., 2012) and the presence of associated behavior problems can lead to more restrictive placements (Mandell, 2008). The Individuals with Disabilities Education and Improvement Act (IDEA, 2004) requires schools to provide a free and appropriate public education (FAPE) in the least restrictive environment (LRE) for students with disabilities. Students with ASD, therefore, require routine monitoring for ED and associated behavior problems for early identification. This can help school personnel implement supports and interventions aimed at preventing or addressing problems that interfere with participation and learning and help maintain the student in the LRE. This poster provides guidance to school personnel on how to practice within a Multi-Tiered Problem-Solving (MTPS) model so they help students with ASD participate in the LRE enabling them to derive benefits associated with inclusive settings.

EMOTIONAL DISORDERS IN ASD

Commonly diagnosed ED include Major Depression, Unspecified Depressive Disorder, and anxiety disorders such as Generalized Anxiety Disorder, Obsessive Compulsive Disorder, Specific Phobia, Separation Anxiety Disorder, and Panic Disorder. In addition, ED often presents with behavior problems including verbal and physical aggression, tantrums and meltdowns, argumentativeness, defiance/non-compliance, and behavior disorders, including Attention Deficit Hyperactivity Disorder and Oppositional Defiant Disorder. Although there is increasing recognition that children with ASD present with emotional and behavioral conditions (APA, 2013), identifying ED in this population can be challenging. This is because ASD and related impairments, such as difficulties in social communication and cognition can affect the student's ability to recognize and label emotions, behaviors, and levels of personnel distress. The presence of behavior problems such as aggression and meltdowns may also affect diagnostic accuracy by overshadowing the underlying ED. Because of these and other assessment issues in this population, it is critical for school personnel to monitor students with ASD for any changes in mood and/or behavior that may indicate an ED is present. Following a standardized ecological assessment approach can assist in early identification and timely application of supports and interventions so the student can participate in the LRE.

MULTI-TIERED PROBLEM SOLVING MODEL

The prototypical prevention-oriented Multi-Tiered Problem Solving (MTPS) model is recognized as a useful framework for guiding school personnel practice in assessing and addressing ED with/without behavior problems in ASD (Magyar & Pandolfi, 2012). The model is designed to reduce the need for more restrictive interventions and educational placements through the use of a data-based, problem-solving team model that uses ecological assessment data to identify student needs and inform the supports and interventions that can improve functioning within the school setting. Once evidence-based supports and interventions are implemented, ongoing data collection helps the team evaluate the student's response and allows for adjustments to the frequency, duration and/or intensity of the supports and interventions to ensure that the least restrictive intervention continues to support the student in his/her participation and learning.

The MTPS model relies on ecological assessment data (see Figure 1 and Table 1) for the early identification of student problems and the environmental factors that may contribute to the problems. These data inform support and intervention decisions. Repeated assessment enables the team to evaluate the student's response to the supports and interventions provided. The model follows a continuum of least restrictive supports and interventions, guided by ecological assessment data, and is illustrated in Figure 2. For students with ASD, Tier 1 supports and interventions seek to address the learning of classroom participation skills and the prevention of behaviors that interfere with participation and learning. Tier 2 and Tier 3 supports and interventions are more intensive than those at Tier 1 and are designed to address ASD and ED needs, and any behavior problems that interfere with participation and learning.

Assessment Approach. Figure 1 illustrates the assessment approach used by the authors in their work with educational systems. It includes routine monitoring for changes in behavior, mood, thinking (talking), activity levels, interests, socialization, and/or repetitive behaviors from the student's baseline levels. If changes are observed, school personnel complete a formal screening for a possible ED and a Functional Behavior Assessment (FBA) for any observed behavior problems. If the screen is positive for an ED, the student is referred for a full diagnostic assessment. Assessment data assist in identifying the least restrictive supports and interventions needed within the tiered system. Once supports/interventions are identified and implemented, school personnel determine benchmark performance for each area addressed and continue with data collection to monitor student response. The team uses response to intervention data to make adjustments to one or more supports/interventions to ensure maximum benefit to the student within the LRE.

Figure 1. Assessment Approach for ED in ASD

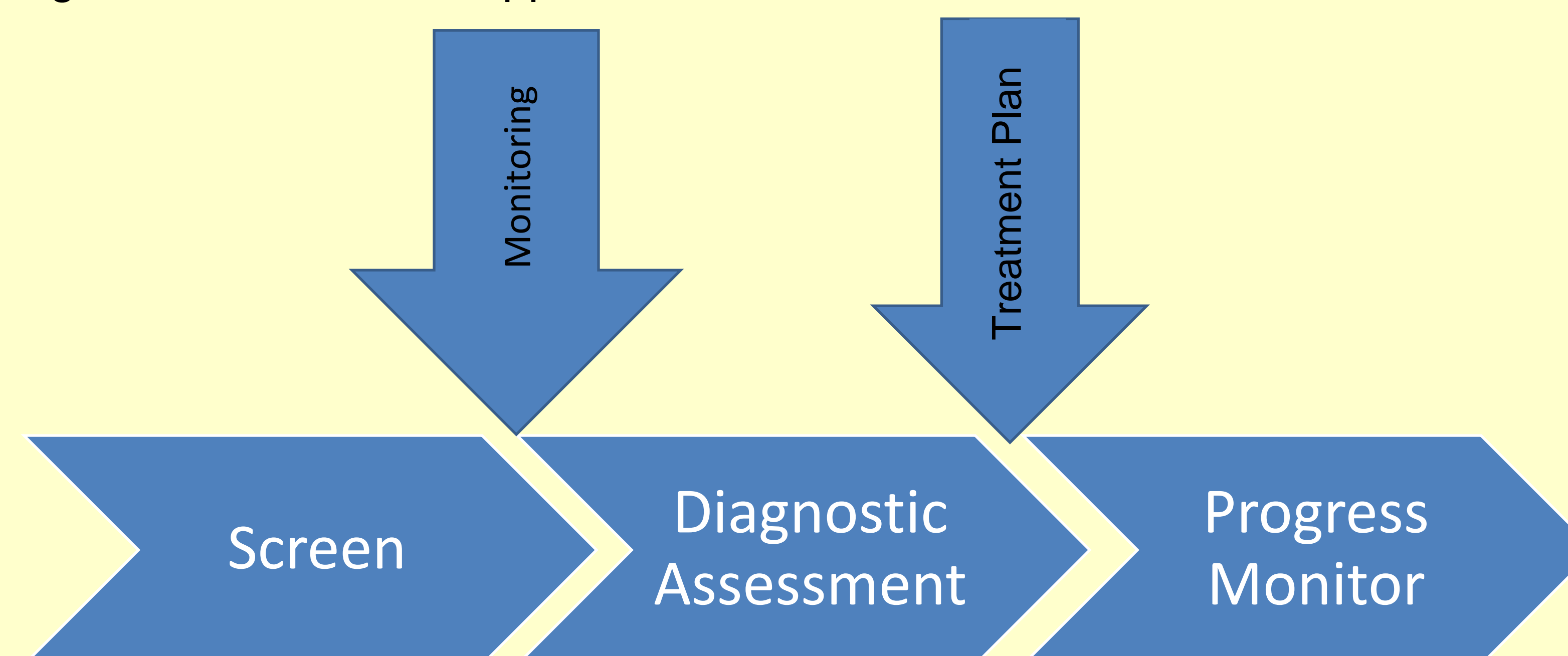


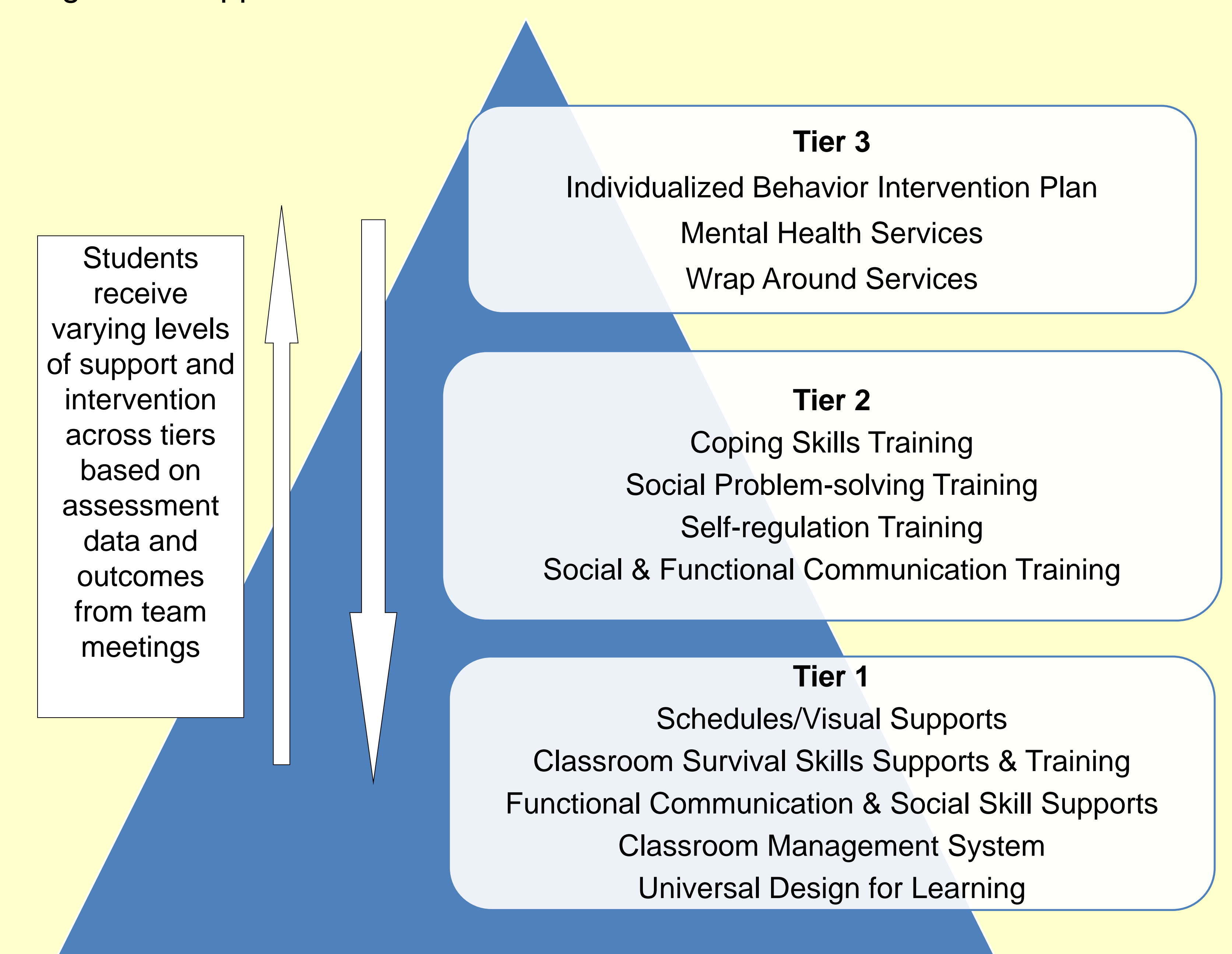
Table 1 illustrates the various assessment purposes within the model and the methods/measures that should be considered.

Table 1. Purpose and Methods/Measures for ED Assessment in ASD

Purpose	Method/Measure
Routine Monitoring	- <i>Antecedent-Behavior-Consequence (ABC) form</i> : for noting any change from typical baseline levels & contextual factors that may be related. - <i>Direct Observation</i> : multiple settings and across time (may be formal).
Screening	- <i>Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2000/2001)</i> : screen for ED and behavior problems. - <i>Functional Assessment Interview (FAI)</i> : for FBA and identifying function(s) of behavior problem (if relevant).
Diagnostic Assessment	- <i>Record Review</i> : for developmental and behavioral history. - <i>Autism Spectrum Disorder measure</i> : to assess ASD features that may be related to the development/maintenance of the ED/behavior problem. - <i>Vineland Adaptive Behavior Scales-2nd Ed (Sparrow, Cicchetti, & Balla, 2005)</i> : to assess current levels of functioning. - <i>Child Behavior Checklist</i> : may be repeated as part of the assessment. - <i>Aberrant Behavior Checklist (ABC; Aman, Singh, Stewart, & Field, 1994/2002)</i> : for specific behaviors associated with ED and behavior problem(s). - <i>Kiddie-Schedule for Affective Disorders and Schizophrenia (K-SADS; Kaufman et al., 1996)</i> : for clinical interview of ED and behavior disorders.
Progress Monitor	- <i>Individual Data Collection Form for Target Behaviors</i> : based on dimensions of the behavior. - <i>Antecedent-Behavior-Consequence (ABC) Form</i> : based on dimensions of the behavior. - <i>Child Behavior Checklist-at 2 or 6 months</i> for changes in ED/behavior problems. - <i>Aberrant Behavior Checklist</i> : monthly (minimally) for changes in specific behaviors.

Supports and Interventions. Figure 2 shows the research-based supports and interventions to be considered at each tier to address the ASD related impairments and ED/behavior problem (see Magyar, 2011, Magyar & Pandolfi, 2012). **Tier 1** addresses some of the ASD and ED features that can interfere with participation in the classroom. These include: (a) direct instruction on classroom routines and the establishment and training on schedules and visual support systems to support independence in executing the routines, (b) a formalized classroom management system to assist students in meeting behavioral expectations, and (c) various incidental teaching methods to assist the student in learning and applying functional communication and social interaction skills needed for classroom participation). **Tier 2** targeted interventions address any ASD related impairments in functional communication and social skills, self-regulation of restricted and repetitive behaviors, and the self-regulation of emotions and behavior related to the ED with/without behavior problem. **Tier 3** supports and interventions address student problems that have not responded to Tier 1 and 2 interventions and include a Behavior Intervention Plan, referral for wraparound and community-based mental health services, and in some cases, additional related services, and placement in a more restrictive setting.

Figure 2. Supports and Interventions within the MTPS Model



CASE EXAMPLE

The MTPS model described here was applied in an elementary school located in a rural school district in NYS where about 5% of the student population had ASD and ED with behavior problems. The implementation of the MTPS model was part of a multi-year program development initiative focused on establishing a continuum of programs and services for students with ASD and related disorders. The following technical assistance activities were provided by the first author: (1) establishment of the team responsible for implementing the model and the procedures for team process and long-term maintenance, (2) establishment of the assessment protocol and professional development for implementation and data analysis within a problem-solving model, and (3) establishment of a supports and interventions 'toolbox' for each tier and professional development on implementation. First year implementation data indicated adequate roll-out of the model and high levels of satisfaction from personnel and school administrators. Data indicated that year 2 activities should focus on continued professional development for model implementation, particularly for FBA/BIP and several tier 2 targeted interventions.