

# Prevent-Teach-Reinforce for Young Children

## The Early Childhood Model of Individualized Positive Behavior Support

by

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## About the Authors

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# Introduction to PTR-YC



This book describes a model for resolving serious challenging behaviors of toddlers and preschool-age children: Prevent-Teach-Reinforce for Young Children (PTR-YC). In writing this book, we had two goals: 1) to provide a complete description of the model and 2) to develop a user's manual for implementing the model. The first goal will be achieved by presenting the rationale, background, and procedural steps of PTR-YC. The second goal will be achieved by laying out in operational detail everything that is needed for early childhood professionals to implement each step of the model with the fidelity required to effectively resolve even the most intensive and persistent challenging behaviors.

PTR-YC is a research-based strategy designed to reduce challenging behaviors of young children in preschool, early education, and child care settings. The model is intended to help young children whose behaviors are serious enough that they interfere with the child's ability to engage in positive relationships, form friendships, play with others, and learn expected skills.

When we use the term *challenging behaviors*, we are referring to any actions or behavior patterns that cause this type of interference. The most common kinds of behaviors referred to as "challenging" are excessive and inappropriate crying, violent tantrums, throwing objects, kicking, hitting, pushing, spitting, yelling, running, and repetitive or perseverative actions that occur for extended and unreasonable periods of time. *Challenging behavior patterns* can also be defined by excessive lack of cooperation (or noncompliance) and a marked failure to respond or interact with others.

Early childhood professionals are familiar with these kinds of behaviors because the behaviors are seen from time to time in virtually every preschool or child care setting. However, PTR-YC is not intended as a strategy for every instance of challenging behaviors. Rather, PTR-YC is an approach that is used when an individual child repeatedly engages in challenging behaviors over a period of weeks and when those behaviors are unresponsive to the regular guidance, redirection, and instructional strategies used within the classroom. PTR-YC requires a deliberate commitment by program staff and leadership to develop and implement a systematic strategy of intervention and, to be effective, it requires an effort to implement the strategy with care and consistency. Therefore, PTR-YC is used only when it is very clear that an individual child needs some extra help and carefully designed assistance to overcome his or her patterns of challenging behavior and begin to adopt more positive ways of interacting with peers and adults.

PTR-YC should be considered for any child who engages in repeated patterns of challenging behavior that clearly interfere with the child's social-emotional development.

So, who are the children for whom PTR-YC should be considered? The simple answer is any child who engages in repeated patterns of challenging behavior that clearly interfere with the child's social-emotional development. The model was developed for toddlers and

preschoolers from 30 months old to kindergarten entry. It is applicable for children who have challenging behavior but otherwise have typical patterns of development, and it is applicable for children who are identified as having developmental disabilities or who are at risk for disabilities. PTR-YC can be used with children who have autism, intellectual disabilities, or an emotional disorder, and it can be used with children who have not been identified with any disability. PTR-YC can also be used in preschool programs, Head Start classrooms, child care centers, or any other program of early care and education.

PTR-YC is used by teams of individuals within a program (or classroom) who are concerned with and responsible for the child with challenging behaviors. The teams can vary in size, but they almost always include a lead teacher or provider and a family member. They often include a program director, a classroom aide, a behavior specialist, a mental health coordinator, or related services personnel. Teams may also include extended family members, friends, and volunteers if they are closely connected to the child. It is good to include any person who is directly involved with providing guidance, care, or education for the child, and it is important to have at least one or two people on the team who serve as facilitators or leaders and whose role is to be most familiar with the procedures and content of PTR-YC. We expect that it will be these leaders and facilitators who will offer guidance for the other team members. This book is for these leaders and facilitators.

## GUIDING BELIEFS AND PRINCIPLES

As a group, we (the authors of this book) have worked for dozens of years with young children in public and private preschool programs, Head Start centers, child care, and infant and toddler programs. We have worked as teachers, directors, behavior specialists, researchers, and consultants, and we have developed and implemented model programs in classroom and home settings. In all of these roles, we have been convinced of the importance of certain assumptions or beliefs about young children and social-emotional development in early childhood. The PTR-YC model is based on these foundational principles, which are briefly described in the following paragraphs.

### Healthy Social Development as an Essential Foundation

Learning of all sorts is fundamentally a social phenomenon, and the greatest pleasures, accomplishments, and satisfactions that people experience throughout their childhood and adult lives come from their relationships and their interactions with others. Therefore, it is vitally important for early care and education programs to place the greatest emphasis on children's development of social interaction skills, friendships, and healthy emotional responses to complex social situations. We believe it is good practice for early educators to screen for potential problems in social-emotional development, maintain practices that encourage prosocial behaviors, and implement additional supports for those children who may be experiencing difficulties.

### Inclusion

Social behaviors are learned in social contexts, so it is important for children with developmental delays or disruptions—including challenging behaviors—to have rich opportunities to regularly interact with peers who have already developed patterns of positive interactions. The readiness model in which children with disabilities are educated in self-contained programs has not been shown to yield long-term benefits. Instead, considerable research has shown that inclusive programs, with appropriate supports, can be most beneficial in helping all children improve in their social-emotional and relationship abilities. We understand that inclusive programs are not always available for children with disabilities, so we appreciate that fully inclusive experiences may need to be arranged through supplemental

services. Nevertheless, we emphasize the importance of providing many opportunities for successful, social participation by young children and especially for children with delays and difficulties in social interactions.

### **Prevention**

As a general rule, efforts are more beneficial and cost efficient if they serve to prevent, rather than repair, social and emotional distress and challenging behaviors. There is much that can be done in the realm of universal strategies that can promote resilience and prevent the emergence of social and emotional difficulties. The topic of prevention is treated more thoroughly later in this chapter and throughout the book.

### **Comprehensiveness**

All aspects of child and family functioning need to be appreciated and incorporated into the design and implementation of services for young children. This book focuses on procedures for resolving challenging behavior, but those procedures constitute only one aspect of the full array and continuum of services.

### **Family Centeredness**

The social and emotional needs of children may reflect the needs of the family, and the most crucial resources available to children are often those of the family. All recommendations and assistance efforts must involve the family, and individual support efforts must be driven by the family's input and the family's goals. Respect for diversity among families is necessary. Family centeredness and sensitivity to and respect for the individuality of family perspectives also implies a need to be responsive to the cultural and linguistic characteristics that each family and child bring to the program.

## **PREVENTION**

Although every effort has been made to make the procedures in this book as practical, effective, and feasible as possible, implementing PTR-YC requires some time, some effort, and a distinct commitment. Furthermore, considering PTR-YC means that at least one child has already developed patterns of serious challenging behaviors. Clearly, it would be preferable if the challenging behaviors had never emerged in the first place. That is, it would have been better if the development of challenging behaviors had somehow been prevented.

It is not possible to prevent all challenging behaviors. Some children have so many risk factors (including severe disabilities) that the emergence of some challenging behaviors may be inevitable. For these children, when challenging behaviors have become a detectable problem, then individualized intervention, such as with PTR-YC, is a necessary element of the child's service plan.

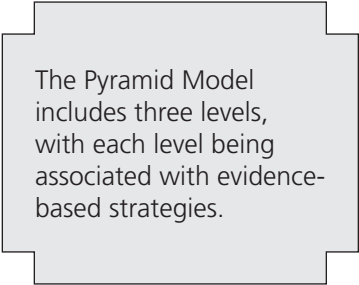
It is clear, however, that many, and perhaps most, challenging behaviors can be prevented from ever developing, even with children who are born with developmental and intellectual disabilities. Because prevention is preferable to intervention, we turn now to a brief discussion of reasonable approaches for helping to prevent the emergence of challenging behaviors.

A broad, validated approach for promoting healthy social-emotional development and preventing the occurrence of challenging behaviors is to establish and implement high-quality environments. Such environments are characterized by clarity, safety, structure, predictability, the presence of interesting and stimulating materials and activities, and clear expectations for how children should behave. The implementation of high-quality environments includes considerations related not only to the physical setting but also to the manner with

which adult–child interactions are conducted. The National Association for the Education of Young Children published pertinent guidelines regarding developmentally appropriate practice (Bredenkamp & Copple, 1997). More specific to the needs of children with developmental challenges, the Division for Early Childhood (DEC) of the Council for Exceptional Children has published detailed guidelines regarding recommended practices for children with multiple risk factors and/or disabilities (Hemmeter, Smith, Sandall, & Askew, 2005; Sandall, Hemmeter, Smith, & McLean, 2005). These practices are derived from the literature and have been validated in numerous ways. Adherence to these guidelines will serve to promote positive social development and prevent many, if not most, challenging behaviors.

In addition to the DEC recommended practices, frameworks have been established for organizing evidence-based strategies in a hierarchical system for promoting healthy social-emotional development, preventing the emergence of challenging behaviors, and intervening with challenging behaviors when they occur. Such frameworks are known as tiered or multitiered approaches. One well-known framework that pertains to social-emotional behaviors is the Pyramid Model (Fox, Dunlap, Hemmeter, Joseph, & Strain, 2003). Like many multitiered approaches, the Pyramid Model includes three levels, with each level being associated with evidence-based strategies.

The universal level, the base of the pyramid, consists of strategies that are applicable for all young children within a program, regardless of their developmental status. The universal level includes strategies relating to building positive, responsive relationships between children and caregiving adults as well as relationships with peers. The universal level also provides strategies for providing high-quality environments. For children who have risk factors or who show some potential problems with social interactions, the Pyramid Model describes secondary strategies. These strategies involve additional individualization and intensity with respect to the provision of guidance and support, the specificity of instruction, the degree of family involvement, and the collection of assessment and progress monitoring data. For some children who require secondary interventions, specialized curricula regarding social skills, problem solving, or emotional literacy may be recommended (Joseph & Strain, 2003). When children do not adequately respond to secondary interventions and when patterns of challenging behavior become evident, then more intensive and more individualized interventions may be needed. The top of the pyramid consists of tertiary interventions, which may also be known as individualized positive behavior support. This book describes a way to develop and implement tertiary interventions. In other words, PTR-YC is a tertiary intervention strategy.



The Pyramid Model includes three levels, with each level being associated with evidence-based strategies.

The Pyramid Model is being implemented in many programs around the country, and it has been described in many publications. Research has documented the effectiveness of the model (e.g., Branson & Demchak, 2011; Snyder, Crowe, Miller, Hemmeter, & Fox, 2011), and systematic guidelines for Pyramid Model implementation have been described (e.g., Fox & Hemmeter, 2009; Hemmeter, Ostrosky, & Fox, 2006). Although a description of the specific practices is well beyond the scope of this book, we recommend that universal and secondary strategies of the Pyramid Model be implemented in programs prior to implementing tertiary practices. Implementing universal and secondary practices is likely to prevent some challenging behaviors from developing, and their presence is likely to make tertiary interventions for challenging behaviors that already exist more effective and efficient. The best location to obtain detailed information about the Pyramid Model and its processes and practices is at <http://www.challengingbehavior.org>.

Although a full presentation of the Pyramid Model is beyond the scope of this book, the PTR-YC model does include strategies for assessing and implementing a number of core

practices that are pertinent for implementation within early childhood settings and applicable for all of the children within the program. Implementing these practices is useful for promoting desirable social behavior and for preventing many challenging behaviors. It is reasonable to expect that faithfully implementing these practices could completely resolve the challenging behaviors of some children, making the use of PTR-YC unnecessary.

## UNDERSTANDING CHALLENGING BEHAVIOR

When challenging behaviors occur to the degree that a team determines that intervention is required, it is extremely helpful if members of the team have knowledge regarding the natural laws that explain how the environment influences behavior. This is the case because effective behavioral interventions are based on the principles that define the relationships between events in the environment and occurrences of a child's behavior. PTR-YC has its foundation in these natural laws, and all of our behavior is subject to their operations. In this section, we briefly describe the key principles that help us to understand how, when, and why challenging behaviors occur. As we understand how, when, and why challenging behaviors occur, we gain insight into how challenging behaviors can be resolved.

Most challenging behaviors serve the same purpose as other forms of communication, such as speech, nonverbal gestures, and facial expressions.

### Principle 1: Challenging Behaviors Are Communicative

This basic principle simply means that most challenging behaviors serve the same purpose as other forms of communication, such as speech, nonverbal gestures, and facial expressions. In this sense, challenging behaviors may often be the same as requests or demands. For instance, the loud tantrum of a 4-year-old boy may be communicating a request for food. Or, the crying of a 3-year-old girl may be communicating a request to stay longer at the sand table instead of moving to circle time. The hitting and kicking of a boy in the preschool playground may be indicating that he wants to grab a peer's toy truck to play with himself. Sometimes challenging behavior is used to communicate a desire for attention; sometimes challenging behavior is used to communicate a desire to get out of an activity; sometimes challenging behavior is used to communicate a request for a food item or a toy. The point is that challenging behaviors are often used because they work to act on the social environment in much the same way that other forms of communication act on the environment. For this reason, we usually see more challenging behaviors exhibited by young children whose speech (or other communication) is not well developed or by young children whose speech has not been as effective as their challenging behaviors.

There are a few things that are important to note about this principle. First, even though the challenging behavior may be communicative in nature, this does not mean that the behavior represents a conscious or deliberate act. To understand a challenging behavior in terms of its communicative properties does not mean that the behavior is cognitively determined or premeditated. Second, the form of the behavior (what it looks or sounds like) does not represent a specific communicative intent. For example, if a child spits at a teacher when he or she is being escorted to an art activity, then the form of the behavior may be spitting, but the intent (or function) of the behavior may be to escape from the art activity. Understanding the particular meaning of the communication involves an assessment that is different from identifying the form. The process for understanding the communicative purpose (or function) of the child's challenging behavior is an important element of PTR-YC and is described in Chapter 4. Finally, it is important to appreciate that a child's challenging behavior may look (or sound) the same in different situations, but the communicative



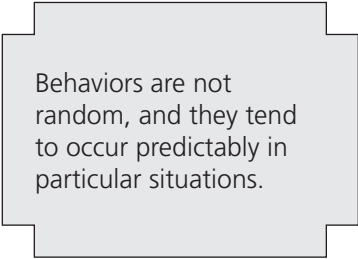
purpose might be different. For example, a tantrum may have one meaning in the context of one routine, but it might have a different meaning in a different routine or circumstance.

### Principle 2: Challenging Behaviors Are Maintained by Their Consequences

The law of reinforcement is perhaps the most basic law of behavioral science. It states that a behavior will be maintained if it is followed by a positive reinforcer. For our purposes, a positive reinforcer can be considered a reward. For challenging behavior that is communicative in nature, the reward would likely be the object or action that is being requested. If a child is using tantrums to communicate a desire for attention, then the reward would be when the teacher attends to the child. If a child is hitting a peer in order to obtain the peer's toy truck, then the reward would occur when the child actually obtained the truck. If a child is crying to extend her time at the sand table, then the reward would be the removal of the teacher's request to move to circle time. There are many kinds of consequences. One way to look at it is to say that consequences involve either getting something (e.g., attention, food, a toy) or getting rid of something (e.g., a demand, an unpleasant activity, a disliked peer). The big point is that consequences are important. Challenging behaviors will not continue if they are not somehow followed by consequences that serve as rewards. And by the same principle, desirable behaviors will not develop or occur if they are not followed by consequences that work as rewards.

### Principle 3: Challenging Behaviors Occur in Context

Challenging behaviors occur at different rates or intensities in different contextual or environmental circumstances. For example, one child's screaming may occur frequently when he or she is being asked to participate in fine motor tasks, but the same child might never scream during snack or outdoor play. A different child might never have a tantrum during fine motor tasks but might cry and fuss a great deal during snack time. A third child might run around and appear out of control when he or she is expected to be in Ms. Prine's area but is always calm and productively engaged when he or she is with Ms. Johnnie, the classroom aide. The observation that behaviors are not random and they tend to occur predictably in particular situations is a principle that can be useful in efforts to resolve children's challenging behavior.



Behaviors are not random, and they tend to occur predictably in particular situations.

The previous three principles are basic to the way in which we seek to understand how a child's challenging behavior is influenced by events that occur in his or her environment. As we describe in the remaining chapters of this book, this process of understanding is essential to the development of an intervention strategy that will be effective, efficient, and respectful of each child's individuality. The way that we go about understanding each child's challenging behaviors is through a straightforward process known as *functional assessment*, which is described in Chapter 5. Understanding how a child's behavior occurs in context leads to strategies of environmental or antecedent arrangements that we categorize as "prevent" because they serve to promote desirable behaviors and discourage challenging behaviors before they occur. Understanding how a child's challenging behaviors serve as communication leads to strategies involving teaching the child to communicate in more desirable ways; thus, we use the category of "teach." Understanding how consequences are maintaining challenging behaviors leads to strategies involving modifications of consequences, especially positive reinforcers; thus, we use the category "reinforce." And this is why we refer to the model as "Prevent-Teach-Reinforce."

## THE PROCESS OF PTR-YC

The process of PTR-YC is similar to the well-documented, step-by-step process of individualized positive behavior support described in hundreds of articles, books, and web sites. The difference is in how the steps are implemented. In PTR-YC, the procedures are tailored for use with young children in early childhood settings, and the descriptions of the implementation strategies at each step of the process are designed to be as practical as possible, with the emphasis always on helping the team implement the steps with enough accuracy and consistency that desirable child outcomes are as likely as possible. The details of the steps are described in subsequent chapters, and the basic process is described next.

### Step 1: Teaming and Goal Setting

The first step in the process involves the establishment of a classroom-based team, an agreement on how the team will function, and the specification of initial, short-term goals. Teams vary in size, but they must include the individual who will be responsible for implementation of the intervention plan, usually the lead teacher or care provider. Teams should also include a parent or other family member, an individual who can facilitate access to resources (e.g., director, administrator), and a classroom assistant. Other members may include a psychologist, speech-language therapist, counselor, or social worker. It is useful to have at least one member who is knowledgeable and experienced with behavioral theory, applied behavior analysis, functional assessment, and intervention planning and implementation. At least one member of the team is identified as a leader or facilitator, and he or she must be familiar with the content and the tools described in this book. Teams hold several meetings over the course of the PTR-YC process and are responsible for implementing the entire process as faithfully as possible.

The first responsibility of the team is to establish clear goals for the PTR-YC process. Goal setting includes two specific objectives: 1) identifying and defining an initial challenging behavior to be resolved and 2) selecting and defining a desirable behavior, which is usually a social-communicative behavior, that will be increased or taught and that will help serve as a replacement for the child's challenging behavior.

### Step 2: Data Collection

The team must design a practical system of data collection for measuring the levels at which the challenging behavior and the desirable behavior are occurring. This measurement must start before intervention is begun because it is the way we determine whether our intervention is being successful or if it needs to be revised. There are many possible methods for measuring behavior and monitoring progress; however, we limit our recommendations to those strategies that are highly practical for use by teachers and other classroom personnel who have additional ongoing responsibilities. The strategy we recommend most often is the use of a 5-point behavior rating scale (Dunlap, Iovannone, Kincaid, et al., 2010; Kohler & Strain, 1992). The procedures for using the PTR-YC Behavior Rating Scale are described in detail in Chapter 4. The Behavior Rating Scale is designed to be user friendly, and we have found that classroom personnel can use the system with an expenditure of surprisingly little time or effort.

### Step 3: PTR-YC Assessment (Functional Behavioral Assessment)

This step involves obtaining and organizing the information needed to understand how the challenging behavior is influenced by the environment, which is the key to developing intervention plans that will be effective and efficient. The PTR-YC assessment is a form of functional behavioral assessment in which questions are answered in a checklist format in

three categories relating to antecedent variables (prevent), function and replacement variables (teach), and consequence variables (reinforce). The available response options are all commonly encountered in preschool and early care programs, and an open-ended response option is always provided. The assessment questionnaires are completed by each team member as well as other people who are involved with the child, and the responses are discussed and summarized in a team meeting, which provides for consideration and integration of team members' different perceptions of environmental events related to the target behaviors. The objective of the PTR-YC assessment is to arrive at a team consensus regarding 1) the antecedent events that are associated with a high probability of the challenging behavior occurring, as well as a low probability, 2) the purpose or function of the challenging behavior, and 3) the typical events that have followed the occurrence of the challenging behaviors and potential objects or events (rewards) that might be used as positive reinforcers during intervention. The results of the PTR-YC assessment are used to develop an intervention plan.

#### **Step 4: PTR-YC Intervention**

When the assessment is completed and the team has developed an understanding about how the challenging behavior is related to and influenced by the environment, then a team meeting is devoted to developing an intervention plan. Chapter 6 describes the process for selecting intervention procedures from each of the three categories and explains how to match assessment data with intervention strategies. Descriptions of evidence-based strategies for each of the three categories, along with information about how to implement the strategies, are presented in the appendixes at the end of the book. Chapter 6 also describes clear procedures for organizing the selected intervention strategies into a behavior intervention plan and specifies how, when, and by whom the strategies will actually be carried out. Finally, this step includes procedures that may need to be included to prepare classroom personnel to implement the strategies.

#### **Step 5: Using Data and Next Steps**

This step begins with (ongoing) examination of the progress monitoring data (usually the PTR-YC Behavior Rating Scale data) to determine if progress has occurred as anticipated or if the progress is unsatisfactory. If desirable progress has occurred, then the next steps involve doing what is necessary to make sure that the progress will be maintained and that continued progress will occur. If progress has been less than satisfactory, then there are a number of options to consider (see Chapter 7).

In addition to the five steps previously outlined, it has become apparent that a number of challenging behaviors that appear as if they would require individualized and assessment-based interventions can actually be resolved by implementing high-quality classroom practices that are applicable for all children. Therefore, we have incorporated additional material in Steps 3 and 4 (assessment and intervention) that is pertinent to the operation of the entire classroom. The practices described in Chapters 5 and 6 will be enough to resolve the challenging behaviors in some cases to the point that an individualized behavior plan is unnecessary.

The PTR-YC process usually occurs over a 2- to 4-month period with an average of three to four team meetings scheduled for planning and coordinating the multicomponent interventions. Key features of the PTR-YC package are explicitly intended to heighten the teams' fidelity in implementing the five-step process and the individualized interventions. These features include 1) team-based, rather than expert-driven, assessments and decision making; 2) a simple strategy of functional behavioral assessment that incorporates the observations of all team members; 3) menu-driven intervention planning with multiple evidence-based options for each of the PTR components; 4) self-evaluations to determine if each step

was successfully completed; and 5) a requirement that reliable, but practical, progress monitoring data be obtained and summarized on an ongoing basis. In addition, we offer a PTR-YC Team Implementation Guide (TIG) as a supplement to the chapter-specific self-evaluations. It provides a concise overview and checklist of the entire process. The TIG is presented in Figure 7.6 at the end of Chapter 7. Team leaders and facilitators may wish to review the TIG prior to initiating the PTR-YC process.

Our purpose in writing this book is to describe the steps of the PTR-YC process in clear language and provide guidance and tools that will enable you and your team to effectively use the procedures. The following chapters describe all steps of the process. Chapter 2 begins with a discussion of families and how they can be involved in the PTR-YC process. Chapter 3 describes the development of a team and the procedures for setting clear goals and target behaviors. Chapter 4 describes strategies for beginning data collection. Chapter 5 is about the PTR-YC assessment process, and Chapter 6 describes the development of the behavior intervention plan. Chapter 7 is about using the data to take the next steps in the process. If these steps are implemented with care and consistency, then we believe that the majority of challenging behaviors will be resolved and that the child who is being supported will benefit from a healthier trajectory of social-emotional development. We believe this strongly because of our own experiences and the research we have conducted and because the entire process is based on a substantial foundation of multifaceted, applied research.

## RESEARCH FOUNDATIONS

The procedures of PTR-YC are derived from well-established principles of behavior as well as extensive, practical research on strategies of intervention for challenging behavior. Intervention research that is the foundation of PTR-YC emanates primarily from two closely related approaches: applied behavior analysis (ABA) and positive behavior support (PBS).

ABA is a broad discipline in which principles of learning are applied to produce socially meaningful changes in a person's behavior. It is a discipline that has influenced and contributed to a number of fields including education, social work, psychology, child development, and business. Research conducted since the 1960s has clearly demonstrated the validity and numerous contributions of ABA. It is important to understand that ABA can be manifested in many ways and, therefore, the term can be misunderstood. For example, some people refer to ABA as a single, highly structured curriculum for treating children with autism. But ABA is a much broader approach than could ever be captured in a particular program, and it is relevant for virtually all populations in virtually all contexts. Programs that are strongly rooted in ABA may appear to be different when, in fact, they are based on the same conceptual and philosophical foundations (Cooper, Heron, & Heward, 2007).

PBS is also a broad approach, and it is derived in part from ABA. PBS is an approach for organizing environmental, social, educational, and systems strategies in order to improve the competence and quality of life for individuals with problems of behavioral adaptation. PBS seeks to reduce the occurrence of behavior problems because they interfere with learning and with the ability to pursue preferred lifestyles and positive relationships with adults and peers. PBS is a positive approach because it avoids harsh and stigmatizing punishments and emphasizes instruction and environmental arrangements to achieve desired outcomes. PBS emerged as a useful approach in the mid-1980s and has become an increasingly popular strategy for addressing difficult behaviors and promoting quality of life (Bambara & Kern, 2005; Carr et al., 2002; Dunlap, 2006; Dunlap, Carr, Horner, Zarcone, & Schwartz, 2008; Sailor, Dunlap, Sugai, & Horner, 2009).

The PTR-YC model is rightfully considered to be a PBS approach, and it is also derived from the principles and procedures of ABA. We raise this issue of the model's background because some early childhood professionals may be confronted with questions about the distinctions between PTR-YC, PBS, and ABA. In brief, some answers include the following:

1) PTR-YC is a specific model designed for young children that is entirely consistent with the PBS approach; 2) PBS is derived from the foundations of ABA, though it is different enough to warrant its own label (Dunlap et al., 2008); and 3) ABA is a broad term that refers to a widespread discipline that can accommodate many practices and programs.

Regardless of terminology, PBS and ABA have produced a tremendous amount of research on procedures for addressing behavior problems. The accumulating evidence has yielded a number of important points.

- Challenging behaviors can be interpreted as communication, and gaining an understanding of a child's communicative intent can lead to effective interventions.
- Functional assessment procedures can produce information that is useful for intervention, and the outcomes are more favorable when interventions are based on functional assessments than when interventions are not informed by such assessments.
- There is strong evidence that demonstrates that specific antecedent manipulations (prevent), assessment-based instructional strategies (teach), and consequence-based interventions (reinforce) can produce significant improvements in challenging behaviors and desirable alternatives.
- There is also evidence that multicomponent interventions produce more immediate and more durable effects than single-component interventions (Carr et al., 1999; Dunlap & Carr, 2007).

### Interventions for Young Children's Challenging Behavior

The majority of research on challenging behaviors was conducted with children older than the age of 5. Since the 1990s, however, there has been an increase in research with younger children, and it has become possible to produce syntheses and general conclusions. One analysis of the literature with participants between the ages of 2 and 5 years rendered essentially the same general findings as the literature with older children (Conroy, Dunlap, Clarke, & Alter, 2005). That is, there is ample evidence that functional assessments and the use of assessment-based interventions can be effective for young children in a variety of child care, Head Start, prekindergarten, and home environments (Blair, Umbreit, & Bos, 1999; Blair, Umbreit, Dunlap, & Jung, 2007; Conroy, Davis, Fox, & Brown, 2002; Duda, Dunlap, Fox, Lentini, & Clarke, 2004; Dunlap & Fox, 2009, 2011). Furthermore, there are a number of individual studies that have demonstrated the feasibility and the efficacy of using instruction-based interventions with young children (e.g., Dunlap, Ester, Langhans, & Fox, 2006; Reeve & Carr, 2000). Other data have found positive effects from antecedent manipulations and consequence-based interventions (e.g., Asmus et al., 1999; Conroy et al., 2005). This congruence is not surprising given the universality of the basic principles of learning.

Although effective interventions may have common elements and a shared assessment-to-intervention process, important distinctions must be considered when challenging behaviors are exhibited by younger children. For example, the early developmental status of young children means that many of the intervention practices that are effective with older children may be unsuitable with toddlers and preschoolers. Similarly, the settings and contexts in which interventions are to be implemented differ in meaningful ways. Play is a much more important activity context, and home environments are even more essential for younger children than for older children. Therefore, functional behavioral assessments need to consider the characteristics of these settings and contexts; and family involvement, which is important for all ages, is more vital when children have not yet begun kindergarten. The PTR-YC model takes these important differences into account.

## Prevent-Teach-Reinforce

PTR-YC is a model that is based on many elements of a previous intervention, Prevent-Teach-Reinforce (PTR; Dunlap, Iovannone, Kincaid, et al., 2010), that has been rigorously evaluated using a randomized group design (Iovannone et al., 2009). The 2009 study included 247 participating students between kindergarten and eighth grade in five school districts in Florida and Colorado. The students were from diverse cultural and economic backgrounds, and the study included children in general and special education, including children with a variety of disabilities. Results showed statistically significant differences in problem behavior and social skills as well as academic engaged time, with all results favoring the children who were randomly assigned to the PTR condition as opposed to the business-as-usual condition. In addition, scores on a measure of fidelity for the PTR teachers were high, as were scores on a social validity treatment acceptability scale (Iovannone et al., 2009).

The PTR intervention for school-age children has also been evaluated with single-case experimental and quasi-experimental designs (Dunlap, Iovannone, Wilson, Kincaid, & Strain, 2010; Strain, Wilson, & Dunlap, 2011). A multiple baseline across participants design was used in the study by Strain and colleagues to examine the effects of PTR in comparison with a baseline condition. The participants were three students with autism (5, 8, and 9 years of age) who were in general education placements. The results showed clear and consistent reductions in challenging behaviors and improvements in academic engagement when the PTR intervention was implemented. In other words, the PTR approach is supported by strong evidence of effectiveness when used in real school situations with children who have a variety of characteristics.

## FACTORS THAT PROMOTE EFFECTIVENESS OF PTR-YC

There are a number of factors that influence the effectiveness of PTR-YC. The more these factors are optimized, the more effective PTR-YC will be in addressing challenging behaviors.

### Prevention

We have previously discussed prevention, but it warrants repeated emphasis. The more that a program or classroom incorporates features of high-quality environments and recommended adult-child interactions, the greater the likelihood that serious challenging behaviors will be prevented. Just as important, more children will be likely to learn desirable behaviors for getting along with their peers and adults when these preventive practices are in place. In addition, even when challenging behaviors do emerge, implementing PTR-YC will be easier and more effective, and improvements in the levels of challenging behaviors will be easier to maintain when the classroom is characterized by high-quality environments and positive adult-child interactions.

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### Commitment to Successful Outcomes for Children

The ability to effectively implement PTR-YC is inevitably related to the level of explicit commitment that a program has to the success of all of its children, including children who have disabilities or who exhibit troubling patterns of behavior. Sometimes it may seem easier for a program to say that children who are different belong somewhere else and to address

challenges by expelling the child or asking the parents to find another setting for the child's care and education. The programs in which PTR-YC will be most effective are those that have adopted clear policies pertaining to the delivery of supports for all children and the director and key staff have demonstrated a willingness to take extra steps to enable all children to succeed.

### **Fidelity of Implementation**

The greater the extent to which the intervention team (e.g., teachers) is able to implement PTR-YC as intended, the more effective it will be in addressing challenging behaviors. Although PTR-YC is designed to be robust enough that perfect fidelity is unnecessary (and unrealistic), it is likely that interventions that are infrequently and inconsistently implemented will not produce the intended outcomes for children. If the team is implementing with very high fidelity and the plan is still not as effective as anticipated, then it is time to reevaluate the plan and consider revisions to the intervention strategies.

### **Capacity of the Team**

There are two characteristics of a team that influence the degree to which PTR-YC will be effective. The first is the commitment of the team members to make the plan work. Frankly, we believe that this may be the most important factor of all. If the team is unified in its vision and its commitment to seeing that the child succeeds, then the child will usually prosper. If some members (or even one) fail to embrace the commitment, then there is a greater chance that the effort will fail. The second characteristic involves the knowledge and experience that team members have with respect to functional assessment, problem-solving strategies, activity-based instruction, and implementation of behavior intervention plans. Although relatively inexperienced personnel can often do an excellent job, a general rule is that experience with assessment-based interventions is helpful in identifying problems and resolving them early in the process.

### **Family Involvement**

The more involved family members are in the process, the better the overall outcomes. Even though the focus of the PTR-YC intervention may be on classroom behavior, parents and other family members may have useful tips and results of previous interventions to contribute. Furthermore, if a family is involved with the development and implementation of the classroom intervention, then there is a chance that parts of the plan may be carried out at home, thereby promoting transfer and generalization. If family members are unable to attend team meetings, then they can still be informed of the discussions, decisions, and actions related to the PTR-YC process.

## **LIMITATIONS AND ACCOMMODATIONS**

We believe that PTR-YC will be effective most of the time, and the more that the previous factors are addressed, the more effective it will be in addressing challenging behaviors. However, the model cannot be effective in every situation. First, some factors may contribute to behavior problems that are beyond the capacity of PTR-YC to address. For instance, some children experience neurological and/or medical conditions that are not amenable to the educational and behavior intervention strategies that make up PTR-YC. Uncontrolled seizures, chronic illness, or neurological syndromes can contribute to the presence of challenging behaviors, and it would be inappropriate to attempt to resolve such problems with strictly educational-behavioral procedures. When neurological or medical issues are involved, it is necessary to obtain appropriate medical, neurological, and psychiatric services.

Some children may experience major disruptions in their home environments, and these disruptions may result in problems in a student's emotional and behavioral functioning. The PTR-YC approach is not designed to address serious problems that occur beyond the school setting. Although PTR-YC may be helpful for classroom behavior, additional services will be required in these circumstances before the full source of the problem can be resolved. Furthermore, PTR-YC will not be effective if a child has excessive absences.

There are also times when the PTR-YC approach does not produce fully adequate behavior change, despite the best efforts of the classroom-based team. For example, the child's behavior may be so difficult to observe (e.g., hurting animals, setting fires, injuring others) and so infrequent or unobservable that it is impossible to complete an adequate classroom-based functional behavioral assessment. Staff may be at a loss to determine the function of problem behavior and, therefore, cannot implement an individualized intervention. It may be necessary to call in outside help to monitor the child for serious problem behaviors that rarely occur and/or occur when adults may not typically be present. Such monitoring should have the completion of a reliable functional behavioral assessment as its end goal. In addition, programs may want to solicit a diagnostic evaluation by a licensed child psychologist or psychiatrist for behaviors that have a covert quality to them (e.g., the child seems to purposely engage in challenging behavior when adults are absent). The goal of this assistance should be to determine if other supports and/or professionals need to be involved in this child's life.

In other situations, the team may have designed an individualized intervention plan and implemented the plan with fidelity but the child's behavior has not improved over a period of several weeks. We first recommend checking to see if the reinforcers are sufficiently powerful and then repeating the functional behavioral assessment to confirm the communicative message of the problem behavior. It is not uncommon for a behavior to be found originally to serve one function and then subsequently found to serve different and/or multiple functions. If this step does not yield satisfactory results, then it may be appropriate to call on a consultant who is more experienced in functional behavioral assessment. This individual may decide to 1) use alternative observation procedures to analyze behavior, 2) more thoroughly explore the possible role of events external to the classroom, or 3) ask staff to briefly try interventions that are consistent with several functions. It is vital that staff become trained to implement the methods used by the consultant. Circumstances such as these are more thoroughly addressed in Chapter 7.

## SUMMARY

PTR-YC is a specific model of intervention planning and implementation for young children with serious challenging behaviors. It is applicable for preschool children from 30 months old to kindergarten entry and for children with a broad range of developmental and intellectual characteristics. An extensive base of research documents the effectiveness of PTR-YC's components as well as the process as a whole.

This book is intended to be used as a manual by classroom-based teams in preschool, Head Start, child care, and other early care and education programs. The chapters in the book describe steps in the process of PTR-YC implementation. The chapters include descriptions of the steps, objectives, tools, and recommendations. Each chapter also includes implementation tips, family involvement tips, and case examples. The content of the chapters is designed to be specific enough for teams to follow the process without difficulty. If the steps are carefully followed with precision, then evidence indicates that the child's behavior will likely improve in meaningful ways.



## APPENDIX

### Key Terms

The following list describes some terms that may not be familiar to all readers. These terms are described with the meaning that is intended in the book.

**antecedents (antecedent variables)** Events, actions, items, and circumstances that are present in the environment and have an influence on the occurrence of a child's behavior. Antecedents can serve as triggers for challenging behavior or for desirable behavior, or they can act to make a behavior more likely to occur. Almost anything can potentially serve as an antecedent variable; however, common antecedents for challenging behavior are requests for a child to do something that the child does not want to do.

**applied behavior analysis (ABA)** A scientific discipline that includes practical approaches for assessing and modifying behavior. ABA uses principles of learning theory to develop intervention strategies. ABA is a broad approach that has been demonstrated to be useful for helping many populations of children and adults to develop improved behavior.

**baseline** The period of time before the PTR-YC intervention is implemented. It is a period during which data are collected (see Chapter 4) and during which classroom personnel are using their regular procedures for dealing with challenging behaviors.

**challenging behavior** A term used to describe any repeated pattern of behavior that interferes with optimal learning or engagement in prosocial interactions with peers and adults. This book refers to challenging behavior as persistent behaviors that appear to be unresponsive to normative guidance strategies, with common topographies being prolonged tantrums, physical and verbal aggression, disruptive vocal and motor responding (e.g., screaming, stereotypy), property destruction, self-injury, noncompliance, and withdrawal (Smith & Fox, 2003).

**data** A word meaning facts or information. *Data* in PTR-YC usually refers to observations made about a child's behavior. Data obtained for purposes of conducting a functional assessment (see Chapter 5), monitoring progress (see Chapter 4), and assessing fidelity of implementation (see Chapters 6 and 7) are especially important in the PTR-YC model.

**desirable behavior** A broad term used in PTR-YC to mean a child's behaviors that the team would like to establish or increase. Desirable behaviors include positive social and communicative behaviors and can also include cooperative or parallel play, attending, independent responding, self-care, and self-regulation.

**fidelity** Refers to the extent that an intervention strategy in PTR-YC is accurately implemented as intended. The term is often stated as fidelity of implementation or integrity of implementation.

**function** The purpose or motivation of the child's challenging behavior. There are many possible functions, but they usually can be categorized as to get something (e.g., a toy, someone's attention) or to get rid of something (e.g., a demand, the presence of an irritating peer). The function of challenging behavior can almost always be understood as an attempt to communicate.

**functional assessment (functional behavioral assessment; FBA)** A process that involves collecting information (data) to develop an understanding of how a challenging behavior is influenced, or controlled, by events in the environment. There are many methods for conducting an FBA. In PTR-YC, the FBA is conducted by having team members independently complete three checklists (for prevent, teach, and reinforce) and then synthesize the information on the PTR-YC Functional Behavioral Assessment Summary Table (see Chapter 5).

**hypothesis (hypothesis statement)** A simple statement that summarizes the team's understanding of how a challenging behavior is influenced by the environment. The hypothesis has three elements—the antecedent conditions, a description of the behavior, and the consequences that appear to be maintaining the behavior. For some children, there may be more than one hypothesis statement.

**operational definition** A definition or description of a behavior that is presented in terms that are fully observable and measurable. A good operational definition would mean that all team members would be able to agree at any moment in time on whether the behavior is occurring.

**positive behavior support (PBS)** An approach for helping people (including children) to develop improved desirable behaviors and reduce challenging behaviors. It is an individualized approach that is based on information (data), results of an FBA, and a multi-element behavior intervention plan. PTR-YC is a PBS model that is designed for optimal practicality. It is worth noting that PBS can also be applied to larger units such as classrooms, entire programs, and schools. However, PTR-YC is a model of individualized PBS, and this book is focused on the needs of individual children with persistent challenging behaviors.

**prevent** The first component of the PTR-YC approach. It refers to intervention strategies involving antecedent variables.

**reinforce** The third component of the PTR-YC approach. It refers to intervention strategies involving changes in the delivery of consequences, especially positive reinforcers.

**reinforcer (positive reinforcer)** A consequence provided to a child following a behavior that results in the behavior being increased or strengthened. Part of the PTR-YC approach involves using reinforcers to help increase desirable behaviors, as well as removing reinforcers that may be inadvertently maintaining the child's challenging behaviors.

**target behavior** A term that is used to refer to a behavior that is identified by the team as being in need of change. Target behaviors can be challenging behaviors as well as desirable behaviors.

**teach** The second component of the PTR-YC approach. It refers to intervention strategies involving the delivery of instruction of desirable behaviors.