6

Tailoring the Incredible Years

Parent, Teacher, and Child Interventions for Young Children with ADHD

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Attention-deficit/hyperactivity disorder (ADHD) in young children marks a significant risk for later development of oppositional defiant disorder (ODD), conduct disorder (CD), and more serious antisocial behavior in adolescence (Beauchaine, Hinshaw, & Pang, 2010; Campbell, Shaw, & Gilliom, 2000). Children with ADHD are impulsive, inattentive, distractible, and hyperactive. They have difficulty attending to, hearing, or remembering parental or teacher requests and anticipating consequences and therefore don't seem to be cooperative or to learn from negative consequences. Because of their distractibility, they have difficulty completing tasks such as schoolwork, homework, chores, or other activities that require sustained concentration. Many children with ADHD have difficulties with peers (Coie, 1990; Coie, Dodge, & Kupersmidt, 1990; Coie & Koepple, 1990; Menting, Van Lier, & Koot, 2011). Because of their impulsivity, it is hard for them to wait for a turn when playing, use their words to ask for what they want, or concentrate long enough to complete a game or make a better decision. They are more likely to grab things away from other children or disrupt an ongoing activity because of their impulsivity and lack of patience. In fact, research has shown these children are delayed in their play and social skills (Barkley, 1996; Webster-Stratton & Lindsay, 1999). For example, a 5-year-old with ADHD plays more like a 3-year-old and will have difficulty with sharing, waiting, taking turns, and focusing on a play activity for more than a few minutes and is more likely to be engaged in solitary play. Because these children are annoying to play with, they have few same-age friends, and other children frequently reject them. They are usually the children who are not invited to birthday parties or play dates, a problem that compounds their social difficulties by reducing their social learning opportunities and lowering their self-esteem.

Between 20% and 60% of children with ADHD have a comorbid diagnosis such as ODD, language delays, or learning disabilities (Beauchaine, et al., 2010; Beauchaine & Waters, in press; Ghuman, Arnold, & Anthony, 2008; Ghuman, et al., 2007). ADHD

symptoms, externalizing behaviors, and academic and developmental problems are intertwined with social and emotional problems. For example, impulsive and/or oppositional behaviors make it difficult for children to function in a school setting with peers and teachers. Poor attention, hyperactivity, and language or reading difficulties limit children's ability to engage in academic learning and also result in less encouragement and instruction from teachers as well as parents. Thus children with ADHD are likely receiving negative feedback from their peers, parents, and teachers, creating a cycle whereby one problem exacerbates the other (Barkley, 1996; Dishion & Piehler, 2007).

Behavioral Interventions for Young Children with ADHD

Behavioral treatment research for preschoolers (ages 4 to 6 years) with ADHD is not extensive; however, parent training for young children diagnosed with ADHD has shown some preliminary promising outcomes. For example, Pisterman and colleagues (Pisterman, McGrath, Firestone, & Goodman, 1989) reported improvements in mother–child interaction quality and rates of child compliance among preschoolers with ADHD following parent training. Effects were maintained 3 months post-treatment and were replicated in a subsequent study (Pisterman et al., 1992). Sonuga-Barke and colleagues (Sonuga-Barke, Daley, Thompson, Laver-Bradbury, & Weeks, 2001) reported similar findings, which extended to ADHD behaviors and were maintained at the 6-month follow-up. In a notable exception to this prevailing pattern, Barkley and colleagues (Barkley et al., 2000) recruited 158 kindergarteners who exhibited high levels of ADHD, ODD, and CD behaviors and assigned them to parent training only, classroom day treatment only, a combined condition, or a control group. In general, treatment response was poor, and effects did not persist at a 2-year follow-up (Shelton et al., 2000) and did not generalize beyond the classroom. The parent training intervention produced no added effects. Null effects for the parent intervention are probably attributable to lack of parental attendance and low program dosage, as only 25% of the sample attended more than 4 of 14 sessions. Further research is needed with a more comprehensive and higher-dosage parent intervention.

Research on the Incredible Years Interventions

The Incredible Years (IY) parent, teacher, and child interventions have proven efficacious in reducing conduct problems in multiple randomized control studies for young children with the primary diagnosis of ODD or CD (Webster-Stratton & Hammond, 1997; Webster-Stratton, Reid, & Hammond, 2004). Studies have shown that adding the child and/or teacher program to the parent treatment program has resulted in greater improvement in children's conduct problems in the classroom setting and more sustained results at follow-up assessments (Webster-Stratton & Reid, 2007; Webster-Stratton, Reid, & Hammond, 2001a; Webster-Stratton et al., 2004; Webster-Stratton, Reid, & Stoolmiller, 2008). In these studies, approximately one third of children also had high

levels of inattentive and hyperactive symptoms (Hartman, Stage, & Webster-Stratton, 2003; Webster-Stratton & Reid, 2010). Analyses of predictors of treatment outcomes, including child attention problems, indicated that both the IY parent and child programs were equally as effective for children with ODD with and without comorbid hyperactivity-impulsive-attention problems (Hartman et al., 2003; Webster-Stratton, Reid, & Hammond, 2001b). Moreover, a subsequent analysis indicated that including the IY teacher classroom management (TCM) program in the treatment plan enhanced treatment efficacy for boys with hyperactive and attention symptoms (Beauchaine, Webster-Stratton, & Reid, 2005). However, until recently, the efficacy of the IY programs had not been evaluated among children whose primary diagnosis was ADHD (Webster-Stratton, Reid, & Beauchaine, 2011). This randomized control trial found positive post-treatment effects for a 20-week IY parent and child intervention condition compared to a waitlist control condition for 4- to 6-year-old children diagnosed with ADHD. Results showed intervention effects for (1) mother and father reports of child problem behavior, ADHD symptoms, and social competence; (2) mother reports of positive parenting and discipline strategies; (3) teacher reports of externalizing behavior; (4) independent observations of mother's parenting and coaching, children's behavior problems with mothers, and social contact at school; and (5) children's feelings vocabulary and problem-solving skills. At 1-year follow-up, most of these results were sustained in the intervention group with no significant deterioration in parent or child behaviors from post-treatment to 1-year follow-up. Families in the waitlist control group had received intervention by the 1-year follow-up, so there was no longer an untreated control group for comparison.

IY Interventions for an ADHD Population

When working with preschool children with ADHD, it is recommended that parents be offered the treatment version of the IY parenting program. This program is 20 to 24 weeks and combines the BASIC 16-week parent program with a minimum of four additional sessions taken from the ADVANCE IY parent program. It is also recommended that children receive the Children's Small Group Training Series: Dina Dinosaur's Social Skills, Emotion and Problem Solving Small Group Therapy Curriculum. The Dinosaur School curriculum results in generalization of behavior changes to the school setting and sustained improvement at follow-up (Webster-Stratton & Hammond, 1997; Webster-Stratton et al., 2004) and is effective with children with an ADHD diagnosis (Webster-Stratton et al., 2011). These parent and child programs are offered concurrently and weekly for 20 to 24 weeks in 2-hour sessions. Parents meet with therapists in a parent group at the same time that children meet in groups of six children with two or three child therapists.

For therapists to begin tailoring the program for children with ADHD diagnoses, it is extremely important to understand the core content of the IY treatment programs and the methods and therapeutic process of program delivery. The parent and child programs are described in great detail in each program leader's manuals and in summary chapters (Webster-Stratton & Reid, 2005, 2008, 2009). Although some modifications are made in each program when treating children with ADHD, the core content,

methods, and process are relevant and crucial to implementation of the programs with fidelity. Therapists with a thorough training and understanding of the program quickly see that it is designed to allow for tailoring the teaching and learning process, as well as the emotional and behavioral goals for the individual parents and developmental stage of children. Below, we will provide a brief outline of the program objectives for the IY parent and child programs along with additional areas of focus or program tailoring for children with ADHD.

Tailoring the Core IY Parent Treatment Program for the Child with ADHD

Table 6.1 shows the content and objectives of the core IY parenting treatment program.

One of the core methods for the IY parent program is that therapists work collaboratively with parents to develop individual goals for each parent and child. IY therapists collaborate with parents to tailor the program content to each parent and child's particular situation. For parents of children with ADHD, this tailoring process often involves helping parents understand ADHD and how it affects children's social, emotional, and academic development, setting developmentally appropriate goals around increasing children's attention and focus and reducing misbehavior, strengthening children's emotion regulation skills, and also changing the environment to support children's need for movement, structure, predictable routines, scaffolding, and immediate feedback. Below are outlined some of the ways that therapists work with parents in each major area of the program to address the special needs of families who have children with ADHD.

Parents Learning How to Coach Their Children's Friendship Skills and Help Sustain Their Attention on Play Activities. It is critical that parents of children with ADHD become highly skilled as academic, persistence, social, and emotional coaches. The academic and persistence coaching during child-directed parent play interactions helps the parents scaffold their children's play so that the children can sustain their play activities for longer periods of time. During *persistence coaching*, the parent is commenting on the child's attention and focus regarding the task. For example, a parent might say to his child who is working with blocks, *"You are really concentrating on building that tower; you are staying patient; you are trying again and really focusing on getting it as high as you can; you are staying so calm; you are focused; there, you did it all by yourself."* With this persistence coaching the child begins to be aware of the internal state that is associated with being calm, focused, and patient and persisting with an activity even when it is frustrating. Next the parents learn how to do *emotion and social coaching* during child-directed play. During social coaching, the parents describe the child's behavior when he takes turns, waits, shares, makes a suggestion, follows another's ideas, or gives a compliment. During emotion coaching, parents describe children's feelings, giving more attention to positive emotions than negative emotions. When they do label uncomfortable feelings, they combine this with persistence coaching to help them stay calm. For example, a parent might say to a child who is trying to do a puzzle and getting frustrated, "*That is frustrating and hard work to get the right puzzle piece, but you keep trying and staying patient. I think you are going to find the right one.*" Parents begin practicing this coaching

Table 6.1 **Core Content and Objectives of IY Parenting Treatment Program (BASIC plus ADVANCE)**

Objectives	
Strengthen Parent-Child Relationships and Bonding (BASIC Program)	• Increase parents' understanding, empathy, and acceptance of their child's temperament and developmental stage. • Increase parents' positive and decrease negative attributions about their child and promote realistic expectations for his development. • Teach parents how to use persistence, social, emotion, and academic coaching methods during child-directed play interactions. • Encourage parents to give more effective praise and encouragement for targeted prosocial behaviors and for their children's efforts to self-regulate and stay calm. • Strengthen positive parent–child relationships and attachment.
Promote Effective Limit Setting, Nonpunitive Discipline, and Systematic Behavior Plans (BASIC Program)	• Help parents develop salient rewards for targeted prosocial behaviors. • Help parents set up predictable and safe household routines and schedules and clear rules for their children. • Help parents use nonpunitive and proactive discipline approaches for misbehavior. • Teach parents anger-management skills so they can stay calm and controlled when disciplining their children. • Teach parents how to do compliance training with their children. • Teach parents how to help their children emotionally self-regulate, manage their anger, and problem solve. • Help parents learn how to provide children with joyful and happy experiences and memories and reduce exposure to violent TV, computer games, and a diet of fear or depression.
Strengthen Parents' Interpersonal Skills and Supportive Networks (ADVANCE Program)	• Teach parents coping skills, such as depression, stress and anger management, effective communication skills, and problem solving strategies. • Teach parents ways to work with teachers to develop home–school behavior plans focused on social, emotional, and academic outcomes. • Teach parents how to give and get support in order to enhance peer supportive networks.

during dyadic play with their children; they model appropriate social skills and feelings language and prompt their children's use of appropriate social skills. Later, they are encouraged to arrange scaffolded play dates with other children and to provide peer coaching during these visits to further their children's social and emotional learning experiences. Parents in the group discuss the unique developmental, temperament, and biological differences in their children, such as variation in distractibility, impulsiveness, and hyperactivity. Through role-play practices in the group and weekly home practice assignments with their children, they learn to provide the extra scaffolding and support to their children so they can be successful during these peer play interactions.

Parents Learn to Increase the Saliency of Their Praise and Tangible Rewards. Children with ADHD get less praise and encouragement from adults than children without the diagnosis. When children with ADHD do get praise, they are less likely to notice or even comprehend that they were praised. In fact, frequently parents of these children remark that their children are unresponsive to their praise and encouragement. Because of their inattentiveness, distractibility, and failure to read nonverbal facial cues, children with ADHD need praise that is highly pronounced, salient, and combined with visual and tactile cues. For example, before giving praise to a distractible child, the parent needs to move close and establish eye contact and a physical connection in order to capture his attention. Next, the parent must give the praise with a genuine smile, lots of emotional enthusiasm, and a pat on the back or hug. Finally, the parent clearly describes the social behavior that is being encouraged. For these children, behaviors targeted for praise may include concentrating hard on an activity, waiting a turn, problem solving, asking for something (rather than grabbing), staying calm, and politely asking to be part of a game. Because it is not normal to praise in such an exaggerated way, parents of these children need extra training in these coaching skills and language as well as extra encouragement to keep praising even when their children don't seem to be responsive to or notice their praise.

Parents of children with ADHD often need to break down tasks into smaller parts and praise each part of the process rather than waiting for the completion of a particular activity. For instance, a kindergartner without ADHD may be organized enough to quickly learn a routine for coming home from school: take off shoes at the door and hang up coat and backpack. For this child, it may be reasonable for the parents to praise compliance after all three tasks are completed, and the tasks may quickly become a habit that will no longer need to be elaborately praised each day. For a child with ADHD, however, even this seemingly simple set of behaviors may be too hard to remember. Parents are taught to initially coach and describe each small step with a labeled praise that describes exactly what the child did: "*Thank you so much for taking off your shoes right when you came in the door.*" "*You hung up your coat on the hook! That is so helpful.*" "*I appreciate that you put your backpack away. Now you will be all ready for tomorrow. I am so proud of you for remembering everything.*" Initially parents may be reluctant to describe and praise behaviors that are seemingly so simple and are expected. Through the process of the group, parents are helped to understand that for many children with ADHD, this detailed praise and coaching helps them to organize their behavior and helps keep them focused on completing a complex task without distractions.

Many parents of children with ADHD complain that their children do not seem to have the intrinsic motivation to complete tasks such as chores or homework. Parents

would like their children to complete these tasks out of an internal sense of pride in their accomplishments or an understanding that these tasks are important to contribute to the family functioning or to learn at school. The parent group discusses normal developmental progression of intrinsic motivation and the fact that intrinsic motivation develops over time, often after behaviors have been extrinsically motivated. Moreover, children with ADHD are usually on a slower developmental schedule and it is extremely difficult for them to stay focused on homework or chores and not be distracted by many other things that may be going on in the family. They will take much longer than typical children to develop intrinsic motivation because this requires the ability to take the time to reflect on one's behavior and its consequences. Self-reflection is difficult for any preschooler, but for these children it is even more difficult because of their inability to focus and think ahead to future consequences or back to prior successes or failures. Developmentally they are more like toddlers, still in the stage of individual exploration and discovery. Sticker charts and behavior plans with clearly established behavioral goals and incentives can help children remember the behaviors they are working on and also serve as concrete markers depicting their success. Incentive systems provide salient and immediate rewards as well as a visual reminder to the children of their accomplishments and a continual reminder of the positive consequences of working toward their goal. Behavior charts and incentive programs are covered in detail when working with parents of children with ADHD and refined over time so that parents are able to continually motivate and challenge their children in novel ways. Charts also offer a kind of structure and positive scaffolding that provides a sense of safety and security for distractible and inattentive children.

Parents Learn About Clear Limit Setting and Predictable Schedules. Just as children with ADHD frequently fail to hear vague praise statements, they also fail to focus upon or remember parental instructions. They may not comprehend the parental request if it is unclear, negatively stated, or embedded in a great deal of distracting verbal content and negative emotion or if too many commands are strung together. Therefore, parents of such children need to learn how to make a positive request that is clear, calm, and specific. As when giving praise, parents must get their child's attention before making the request. Moreover, because children with ADHD live in the present moment and have difficulty thinking ahead to future consequences (positive or negative), they are not motivated by delayed consequences. Therefore they need consequences that are immediate and as closely related to the misbehavior as possible. This means that child compliance to a parental request requires immediate praise, and noncompliance needs immediate follow-through.

Because these children are frequently disruptive and don't seem to respond to commands, adults are more likely to speak loudly, yell, and repeat a great many commands. Parents need help reducing their commands to those that are the most important, giving them in a positive, clear, and respectful manner, and then being prepared to follow through if the command is not obeyed. When this is achieved, children will learn that when their parents make a request they are expected to and helped to comply.

Another way to help children follow the rules and to limit the number of commands given is to have clearly articulated schedules for the children. For example, therapists help parents set up a predictable afterschool routine such as hanging up their coat, having a snack, reading together, having a play activity, and eating dinner, and predictable

morning and bedtime routines such as getting dressed (or putting on pajamas), eating, brushing teeth, and washing face and hands. Group leaders work these schedules out with parents and then help them use picture cues for each activity on laminated boards (or magnets for the refrigerator) so children can move each activity to the "done" side of the board. These visual cues and schedules help children know what is required of them during these difficult transition times. The difficulty for young children with ADHD is they forget what they are to do next and get distracted easily. These schedule boards with pictures describing each step, which can be moved or checked by the child himself, help them to remember what to do, thereby increasing their independence and reducing parents' need to remind them. Parents can also add chores to these picture boards, contributing to their children's sense of responsibility in the family.

Parents Learn About Immediacy of Consequences. Children with ADHD need immediate consequences for their misbehavior. However, it is important that parents have developmentally appropriate expectations for their children's behavior. Since children with ADHD are about one-third delayed in their social and emotional development (Barkley et al., 2000), the 5-year-old with ADHD cannot be expected to wait easily for a turn, sit still at a table for any extended period of time, or concentrate on a complex puzzle or Lego set. Parents will need to plan for activities that are developmentally appropriate for their child's abilities and learn to ignore distractible, hyperactive, fidgety, and noisy behaviors as long as they are not hurtful to others. Parents also learn the value of redirecting distractible children to another task in order to keep them from losing their interest or from disrupting others. However, aggressive and oppositional behavior requires time-out so that the behavior is not reinforced. Parents learn the entire compliance training regimen to help their children be more cooperative. However, before doing this training, several sessions will be spent on setting up predictable schedules and reducing commands to those that are most important. Other discipline strategies that work well for children with ADHD are consequences that are immediately tied to the misbehavior. For example, scissors are removed for a brief period if children are using them inappropriately, or children must clean up the floor because they made a mess with the paint.

Problem Solving with Children. In addition to focusing on helping parents understand developmentally appropriate discipline strategies such as reminders, ignoring and redirecting, using brief logical and natural consequences, and giving time-out to calm down for aggression, parents also learn how to teach their children beginning problem solving strategies and to practice more appropriate solutions. Parents help their children learn and practice a variety of prosocial and self-regulating solutions (e.g., trade, ask first, wait patiently, get parent, take a deep breath, share, help another, apologize, use words, tell yourself to calm down, ignore, use positive imagery) using *Wally's Detective Books for Solving Problems at School and at Home* (Webster-Stratton, 1998). These books present children with hypothetical problem situations such as wanting for a turn on the computer, being excluded from play, or being teased for children to solve. Parents and children talk about solutions and act them out with puppets. The advantage of using hypothetical problem situations is that children can practice appropriate solutions when they are calm before trying to use these solutions during real conflict. Then when problems really do occur with siblings or friends, parents help scaffold their interactions and problem solving through the use of social and emotional coaching.

Promoting Positive Adult Communication Between Parents and Teachers. Families of children with ADHD and conduct problems often experience parental depression, marital conflict, high levels of stress, anger-management problems, and a sense of isolation or stigma because of their children's behavior problems and a lack of family, school, or community support (Webster-Stratton, 2012a). Elements of the ADVANCE program focus on helping the parents learn effective communication skills with partners and with teachers, ways to cope with discouraging and depressive thoughts, anger-management strategies, ways to give and get support from family members and other parents, and effective problem solving strategies.

As part of this unit, parents are helped to work together with their child's teachers to develop a behavior plan that supports specific positive goals for the child in the classroom. In the parent group, parents discuss the most effective ways to communicate with teachers, practice how to bring up concerns in a positive, proactive way, and learn how to encourage and support teachers. While the parents are in their parent group, the children are in the small group dinosaur therapy program. The child group therapists for these groups work with parents to develop a behavior plan based on goals that are set by the child group therapists, parents, and teachers. Parents are encouraged to take the lead on working on these plans with the teachers. Parents also problem solve ways to support their child and their child's teachers during the yearly transition from one grade to another.

Tailoring the Core Child Program for Children with ADHD

Table 6.2 includes the core content and objectives for the Children's Small Group Treatment Series: Dina Dinosaur's Social Skills, Emotion and Problem Solving Small Group Therapy Curriculum.

Child Small Group Methods. The core methods of group teaching and therapy are similar regardless of the makeup of the child group. All groups use music, DVD vignettes specific to each content area, role-play practices, child-size puppets, hands-on practice activities, coached play interactions, homework assignments, session summary letters, and phone calls to parents and teachers. Within these methods, the therapists make adjustments according to the unique needs of the children in their groups. For example, the puppets frequently bring in problem scenarios and ask the children to help them problem solve. These problems are formulated to directly reflect the reality of children's issues in the group. For example, Wally (one of the puppets) could be unhappy because his mother yells at him each morning because he starts to play in his room when he is supposed to get dressed (inattention/distractibility), frustrated because circle time at school is long and his body wants to wiggle (impulsivity), angry because a boy took his ball and he got mad and hit him (emotion regulation problems), or sad because his parents are divorcing.

Child Small Group Process. Each treatment group is set up with clear and contingent behavioral expectations that are necessary to manage and teach children with oppositional and aggressive conduct problems. During the first group sessions, rules and expectations are reviewed and role played. Children participate actively in this process

Table 6.2. **Content and Objectives of Dina Dinosaur Social Skills, Emotion and Problem Solving Program**

	Objectives
Making Friends and Learning School Rules	• Understanding the importance of rules • Participating in the process of rule making • Understanding consequences if rules are broken • Learning how to earn rewards for good behavior • Learning to build friendships
Dina Teaches How to Do Your Best in School	• Learning to listen, wait, avoid interruptions, and put up a quiet hand to ask questions in class • Learning to handle other children who tease or interfere with the child's ability to work at school • Learning to stop, think, and check work • Learning the importance of cooperation with the teacher and other children • Practicing concentrating and good classroom skills
Wally Teaches About Understanding and Detecting Feelings	• Learning words for different feelings • Learning how to tell how someone is feeling from verbal and nonverbal expressions • Increasing awareness of nonverbal facial communication used to portray feelings • Learning different ways to relax such as using the calm down thermometer, deep breathing, and positive imagery. • Understanding feelings from different perspectives • Practicing talking about feelings
Detective Wally Teaches Problem Solving Steps	• Learning to identify a problem • Thinking of solutions to hypothetical problems • Learning verbal assertive skills • Learning to inhibit impulsive reactions • Understanding what apology means • Thinking of alternative solutions to problem situations such as being teased and hit or rejected • Learning to understand that solutions have consequences • Learning to critically evaluate solutions
Tiny Turtle Teaches Anger Management	• Recognizing that anger can interfere with good problem solving • Using the Turtle Technique to manage anger • Understanding when apologies are helpful • Recognizing anger in oneself and others • Understanding that feeling anger is okay but acting on it by hitting or hurting someone else is not • Learning to control anger reactions • Practicing alternative responses to being teased, bullied, or yelled at by an angry adult or peer • Learning skills to cope with another person's anger

Table 6.2 **(continued)**

	Objectives
Molly Manners Teaches How to be Friendly	• Learning what friendship means and how to be friendly • Understanding ways to help others • Learning the concepts of sharing and helping • Learning what teamwork means • Understanding the benefits of sharing, helping, and teamwork • Practicing friendship skills
Molly Explains How to Talk with Friends	• Learning to ask questions and tell something to a friend • Learning to listen carefully to what a friend is saying • Learning to speak up about something that is bothering you • Understanding how to give an apology or compliment • Learning to enter into a group of children who are already playing • Learning to make a suggestion rather than give a command

and help to establish the classroom rules. A token system is used whereby children earn tokens ("dinosaur chips") for appropriate behavior. These chips are exchanged for stickers and small prizes at the end of the group. Children receive very high levels of praise and the chip reinforcement. As little attention as possible is given to negative behaviors. Much off-task behavior is ignored, and children are redirected or prompted with nonverbal cues. When necessary, children are given warnings of a consequence (loss of privilege) for disruptive behavior, and leaders follow through with the consequence if the misbehavior continues. Aggressive behavior receives an automatic brief time-out for children to calm down.

Methods and Process for Working with Children with ADHD. The structure of the group is modified for children with ADHD because of their more limited capacity for sustained attention during circle time and their need for more movement than other children. Therapists introduce more songs, more role-play practices and physical activities, and more coaching experiences and hands-on group activities to keep the attention of the children. If the entire group comprises children diagnosed with ADHD the 2-hour format is revised to include three shorter circle-time lessons lasting 10 to 15 minutes instead of two 20- to 30-minute circle-time lessons. In addition, three small group activities are planned instead of the standard two activities, and sessions begin and end with some coached play times to facilitate appropriate peer play.

Once therapists have tailored the schedule to meet the developmental needs, attention span, and activity level of the group, it is important to help children understand and follow the schedule. Therapists use a pocket chart with pictures paired with words showing each segment of the group (play time, circle time, small group time, snack time, etc.). Children take turns using a moveable arrow to show what activity is happening next. A predictable and routine schedule helps these children feel safe in this environment and know what is expected of them. The visual reminder helps to keep them focused if they are unable to think ahead to what is coming next. Even within each segment (e.g., circle time) it is helpful to have a predictable routine. For example, every

circle-time lesson is started with some familiar songs and the puppets make a predictable entrance and greet each student. Video vignettes are always introduced with the "ready, set, action" statement to ensure children are focused.

Therapists will have somewhat different behavioral expectations for each child in the group and therefore will set different limits accordingly. Children with ADHD may be given slightly more physical space than other children, with visible boundaries used to delineate the space. For example, a masking-tape "box" might be placed around the child's chair, and as long as the child is within the tape boundaries he would not be required to be seated with both feet on the floor at all times. It may also be helpful to give the child a sanctioned "wiggle space" to use if it becomes too difficult to stay in the group. This is not a punishment, but rather a self-regulation space so that the child has a place to go to re-regulate and then come back to the group. This space should also have the physical boundary marked out with tape and might have nearby a picture of the puppet Wally relaxing or taking deep breaths as signal to remind children of the calm-down steps. Another approach is to ask the child with ADHD who is becoming very distracted to go over to an area of the room where there is a "Show Me Five" hand posted on the wall and to briefly put his hand on the poster to help him regain focus. This "Show Me Five" hand cue is a signal with a picture for each finger that indicates the following: eyes on the teacher, ears open, mouth closed, hands to self, and body quiet.

The token system is also manipulated to meet the individual needs of the children in the group. For instance, not all children are earning chips for the same behaviors. For a very young child who has ADHD, chips may be given every 30 seconds if she is sitting with her bottom on the chair, or every time she remembers to raise a quiet hand. For another child who has difficulties with peer relationships, leaders will focus on giving praise and tokens for prosocial interactions (helping, sharing, giving a suggestion, listening, problem solving with a friend, complimenting). Leaders look for ways to make sure that children who are working hard at their individual goals are earning chips at relatively equal rates. In this way, each child in the group is working on target goals within a system that is clear and developmentally appropriate, has been negotiated ahead of time, and feels fair to all children.

Therapists are coaching, praising, labeling, and reinforcing (with dinosaur chips) targeted child behaviors such as waiting, managing impulsivity (e.g., remembering to raise a quiet hand rather than blurting out), staying calm, staying in seat, concentrating, following directions, appropriately using wiggle space, and respecting physical boundaries. At first, therapists notice even very short periods of attention, waiting, and calm behavior, and a child might receive a tangible reward such as a token along with praise for sitting in his chair for as short a period of time as 30 seconds. One goal for these children, however, is to help them learn to sustain this kind of attention for longer and longer periods of time. Gradually over the course of treatment, therapists will tailor their rewards, rate of praise, and expectations to extend the children's ability to focus, wait, concentrate, and attend. Very young or extremely impulsive children may have difficulty connecting the tokens with a reward given at the end of the 2-hour session. For these children there may need to be even more frequent opportunities to earn more immediate rewards such as stickers or hand stamps.

Content Focus for Children with ADHD. For children with ADHD, there is a special focus on the content topics of Doing Your Best in School, Emotion Regulation, and

Friendship Skills. These three areas address the key skills deficits experienced by most children with ADHD. In the school unit, for preschool children there is a focus on listening, following directions, and persisting with a difficult play activity. Therapists use "persistence coaching" to coach them to stay focused and to keep trying when something is difficult. In the Feelings and Anger Management units, the focus for these children is on emotion regulation. They learn to relax, recognize signs of dysregulation, and learn to calm down by taking deep breaths, thinking of their happy place, and using positive self-talk. In the Friendship units, these children are taught specific social sequences for situations such as how to enter a group of children who are already playing, waiting for a turn, playing cooperatively with a peer, negotiating the decision-making process with other children, and practicing friendly communication skills.

Doing Your Best in School: School Readiness. Approximately 30% of children with ADHD and ODD also have academic problems such as language or reading delays or learning disabilities (Bennett, Brown, Boyle, Racine, & Offord, 2003; Sturge, 1982). For children with ADHD, the link between written and oral language should be emphasized throughout the curriculum. Each visual cue card that presents a new social, emotional, or problem solving concept has both a picture and a word that describes the concept. Having the children practice "reading" the word on the picture by repeating it aloud, pointing to the word as it is said, and acting out the word at the same time that it is spoken will help children with language delays to associate printed words with spoken words. Small group activities can also be chosen that will reinforce particular academic goals. There are many activities that involve reading and writing that can be adjusted for children's developmental level. These therapist-coached activities provide a low-pressure time for children to experience success with academic tasks that may be difficult for them at school.

Therapists focus special effort on coaching, praising, and encouraging academic behaviors and persistent efforts for children with learning problems. Raising a quiet hand, concentrating on work, checking something again, correcting a mistake, trying again, and persisting on a hard task are all examples of behaviors to reinforce. Cognitive processes are also recognized by therapists. Examples of this are, "*I can see you are really thinking hard about your answer." "You are thinking about the sound that letter makes!" "It's great that you stayed calm and asked for help on that project. Did you tell yourself, I can stay calm when someone grabs the ball?"*

Therapists also use an interactive or dialogic reading approach. This reading style encourages exploration of a book without the sole focus on reading the words accurately. Therapists discuss the pictures with the child by taking turns labeling objects, feelings, or other aspects of the picture, follow the child's lead and interest in the story, and help the child make up alternate endings to the stories, or even act out parts of the story with hand puppets. As children become familiar with particular stories, they may become the storyteller and will read or recite the story back to the therapist. Research has shown that when preschool teachers and parents read dialogically with their children, the children's vocabulary increases significantly (Whitehurst et al., 1999) as well as their word recognition and motivation to read.

Teaching Self-Regulation. It is important to begin to teach children with ADHD to self-regulate and use cognitive strategies and positive self-talk. Initially, adult prompting and visual cues are used to achieve this. Picture cue cards are used as a signal to use

a self-regulation strategy (relaxation or calm down thermometer, stop sign). Children practice simple external self-talk (*"I can do it. I can calm down."*). All children in the group rehearse using these words out loud and are praised for their efforts. They practice using these words in hypothetical situations (pretend that you are feeling mad), and teachers also prompt the self-talk at times when children are beginning to dysregulate.

Part of teaching children self-regulation is also teaching them how to manage their anger when conflict occurs. In the problem-solving and anger unit, the precise steps for how to identify a problem and generate possible solutions are taught, modeled, and rehearsed. For example, specific behaviors that children learn to manage anger are taking three deep breaths, counting to 10, and practicing making their bodies tense and relaxed. Cognitive strategies they learn range from simple statements such as "*I can do it, I can calm down*" to more complex cognitions such as "*I'm feeling mad because my sister took my truck, but I'm going to be strong and use my ignore muscles. Then I won't get in trouble and I will feel better."* Cognitive strategies involve thinking of happy thoughts or places, positive imagery, giving a compliment to yourself, or telling yourself that feelings can change and even though you're mad now, you will feel better later.

Friendship Unit. In the friendship unit, the precise steps for learning how to play with another child are taught, modeled, prompted, and practiced extensively. First, children watch the DVD vignettes of children playing with a variety of toys (blocks, make-believe, puzzles, art projects, etc.) and in a variety of settings (playground, classroom). While viewing these vignettes the children are prompted by the therapists to notice how the children on the video vignettes wait, take turns, and share. One or two of these friendship skills are modeled by the puppet in interaction with the therapist or children. Then each child practices one or two friendship skills with one of the puppets and is reinforced for using these behaviors. Next, each child is paired up with another child (the "buddy") to play with, and the therapist prompts, coaches, and reinforces them for using these friendly play behaviors. Sometimes it is helpful to break up the group by taking pairs of children out of the large group to practice their play skills without the distractions of other children in their peer group. After these dyadic practice sessions, the children return to the group for a circle-time lesson focused on learning and practicing a particular social skill. Children with significant play delays may need to practice the social skills one on one with the puppet before doing this with a peer.

Collaborating with Teachers. Therapists communicating with the child's classroom teacher is particularly important for children with ADHD because attention and behavioral problems interfere with their academic learning. Therapists begin developing their relationships with teachers by asking them to complete standard behavior inventories regarding the child during the initial assessment phase. They also ask teachers to share their concerns regarding the child in the classroom and obtain their input regarding the specific behaviors they think the child needs help with and their priorities for goals. Once dinosaur group therapy sessions begin, therapists provide teachers with summaries regarding the goals for every topic being covered in the program. They call teachers every 2 or 3 weeks to share strategies that are working for them and refine goals. About halfway through the program, child and parent therapists begin to develop behavior plans for children and outline the strategies they believe are helpful. Parents and teachers meet with the child or parent therapists (usually at the school) to discuss these behavior plans, to collaborate on goals for the child, and to share strategies that they

have found particularly helpful. For example, therapists share with teachers how to use Tiny's calm down thermometer, or Wally's solution kit, or some of Dina's reward charts in the classroom. This coordinated team approach to the child's behavior plan builds a support network between all those working with the child and helps promote consistency of approaches and language used across settings.

Moreover, involving teachers in IY TCM training or providing them with training in aspects of the Dinosaur School curriculum enhances what children are learning in the small group dinosaur treatment program. Research suggests this coordinated approach will improve outcomes even more (Webster-Stratton & Reid, 2007; Webster-Stratton et al., 2001a, 2004, 2008). More information regarding the IY TCM program can be found elsewhere (Webster-Stratton, 1999, 2012b).

Clinical Recommendations

- Parents, teachers, and therapists should use social, emotional, academic, and persistence coaching methods when interacting with children.
- Parent IY group interventions should be dovetailed with IY child social, emotional, and problem solving programs.
- Teacher and parent collaboration should be encouraged regarding goals and methods used to manage children's behavior.
- Intervention requires teamwork between therapists, parents, and teachers who are involved in training, consultations, and behavior plans.
- Parents, therapists, and teachers should offer salient and immediate praise and rewards for children's prosocial behaviors.
- Parents, therapists, and teachers should use clear and predictable schedules and positive, specific limit-setting methods.
- Consequences for misbehavior should be immediate and provide new learning experiences.

Summary

In this chapter, we have shown how the IY parent and child programs have been used effectively for children with ADHD. The basic IY parent and child program methods, content, and process are relevant for this population and need only minor tailoring to be effective for children with ADHD. Therapists must understand the rationale for presenting each content component as well as the cognitive, emotional, and behavioral principles and methods that are important for working therapeutically with parents and children (e.g., frequent positive attention for behaviors they would like to see increase and minimal attention for behaviors they would like to see decrease). With this in mind, the parent and child therapists, in collaboration with the parents and classroom teachers, can set individual parent goals and develop a specific behavior plan for each child in the group. Central to this treatment model is the idea that while a specific set of skills are taught in a specific order, the way the skills are taught, the level of sophistication

with which they are presented, and the amount of time spent on each content area must depend on each family's situation, knowledge level, and culture as well as the child's behavioral and emotional needs and developmental level. In this way, the programs can be individualized while at the same time providing parents and children with a support group.

In addition to the parent and child programs, which are described in detail above, it is recommended that teachers of children with ADHD receive the IY TCM program. This program provides teachers with proactive strategies for supporting children's learning and classroom behavior, tailoring their approach to specific developmental needs of all children, including those with ADHD, using positive classroom management strategies, developing individual behavior plans that address children's specific social-emotional goals and partnering with parents to promote strong school and home connections. This program has been shown to be effective for teachers of preschool and school-aged children, improving both teaching practices (Webster-Stratton et al., 2001a) and children's school readiness behaviors and social skills (Webster-Stratton et al., 2008) and strengthening the impact of the IY parent and child programs in reducing externalizing problems at school as well as at home (Webster-Stratton, et al., 2004).

In conclusion, research on the importance of effective parenting on mediating longer-term outcomes for these children provides the hope that consistent, positive, and contingent parenting may help prevent children with ADHD from going on to develop more serious conduct problems. In addition, improvements in children's social and problem solving skills and ability to regulate their emotions provide a protective factor for their success in school and peer relationships.

It is important to note, however, that while the IY parent and child treatment programs have been shown to be effective in helping parents to manage challenging behaviors of children with ADHD and in helping children to use strategies to improve self-regulation and friendship skills, treatment does not change the core developmental deficits that these children experience. These children and their families are likely to need ongoing support in managing the impulsive, inattentive, and hyperactive behaviors over time, particularly during transition times such as moving from one grade to another or from one school to another. As children grow older and develop more self-awareness, they will need and will be able to take advantage of more sophisticated self-management strategies to help them compensate for their lack of natural internal self-control. Thus, treatment beginning in preschool is an important start to supporting these families and children with ADHD but will need to be supported over time.

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Carolyn Webster-Stratton, Ph.D., has disclosed a potential financial conflict of interest because she disseminates these treatments and stands to gain from favorable reports. Because of this, she has voluntarily agreed to distance herself from certain critical research activities, including recruitment, consenting, primary data handling, and data analysis. The University of Washington has approved these arrangements.

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M. Jamila Reid, Ph.D., is hired by the Incredible Years to train other practitioners in the programs.

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