

17

The Incredible Years[®] Group-Based Parenting Program for Young Children with Autism Spectrum Disorder

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Abstract

A new *Incredible Years*® (*IY*) Parent Program for preschool children with autism spectrum disorder (ASD) and language delays (ages 2–5) was recently developed and piloted. It is designed to either complement the 18–20week *IY* Preschool Basic Program for parent groups where children have a mix of behavioral and developmental challenges or to be used independently in a combination of 14–18-week group-based course plus individ-

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University of Washington and Psychologist, Providence Autism Center, Seattle, WA, USA ual home coaching for parents with children with ASD. This chapter includes a summary of the rationale for IY parent program content that promotes social communication and language development, positive relationships and social skills, emotion- and self-regulation, and positive behavior management. The IY collaborative approaches for training and supporting parents are also presented. These approaches include mediating vignettes of children with ASD to trigger parent self-reflection; problemsolving and experiential practices with childdirected play and imitation; communicating with children with and without language skills; practicing parenting skills such as persistence, social and emotion coaching, gesturing, modeling, and prompting; incorporating social sensory routines; engaging in pretend play and using puppets to enhance joint play, social communication, and empathy; and learning the ABCs for managing behavior, including the concepts of antecedent accommodations and environmental modification to promote appropriate behavior, teaching replacement behaviors, and reinforcing target behaviors by providing praise, incentives, and sensory activities as rewarding consequences. Parents learn to identify behaviors that can be ignored and how to use differential attention

© Springer International Publishing AG, part of Springer Nature 2018 M. Siller, L. Morgan (eds.), *Handbook of Parent-Implemented Interventions for Very Young Children with Autism*, Autism and Child Psychopathology Series, https://doi.org/10.1007/978-3-319-90994-3_17

Carolyn Webster-Stratton has disclosed a potential conflict of interest due to the fact she provides training and instructional materials for these treatment programs and therefore stands to gain financially from a positive review. This interest has been disclosed to the University of Washington and has been managed consistent with federal and university policy.

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and get into their child's attention spotlight. The importance of parent goal setting, selfmonitoring, home activities, stress management, self-care, and building parent support networks is emphasized.

Introduction

Children with autism spectrum disorder (ASD) have exceptionally diverse service needs. Compared to typically developing children and those with other developmental disabilities, children with ASD can have higher rates of disruptive behaviors (Hartley, Sikora, & McCoy, 2008), atypical sleep patterns (Limoges, Mottron, Bolduc, Berthiaume, & Godbout, 2005), gastrointestinal problems (Nikolov et al., 2009), anxiety and other psychiatric comorbidities (Simonoff et al., 2008), unique reactions to sensory stimuli (Baranek, David, Poe, Stone, & Watson, 2006), and self-regulatory difficulties from an early age (Gomez & Baird, 2005). As many as 50% of children with ASD exhibit behavioral problems, including tantrums, noncompliance, aggression, and self-injury (Mazurek, Kanne, & Wodka, 2013). These challenging behaviors interfere with children's ability to benefit from parents' socialization efforts. Moreover, parent uncertainty on how to manage these challenging behavior problems adds to their high levels of stress (Estes et al., 2013; Koegel, 1992; Schieve, Blumberg, Rice, Visser, & Boyle, 2007), which in turn contribute to other troubling outcomes such as poor family quality of life (Lee et al., 2009), depression (Phetrasuwan & Shandor Miles, 2009), family isolation, and lack of support (Osborne, McHugh, Saunders, & Reed, 2008).

Intervention programs for young children with ASD are increasingly available (Boyd, Odom, Humphreys, & Sam, 2010; Wong et al., 2013). Clinician-implemented intervention studies have resulted in significant positive effects with regard to children's developmental level and adaptive functioning (Dawson, Rogers, & Munson, 2010; Landa, Holman, O'Neill, & Stuart, 2011; Landa & Kalb, 2012). Interventions that target joint attention, social play, parental responsiveness, imitation skills, and parentmediated social communication therapy have been shown to develop communication abilities in children with ASD (Kasari, Paparella, Freeman, & Jahromi, 2008; Pickles et al., 2016; Poon, Watson, Baranek, & Poe, 2012; Siller & Sigman, 2008). Parent involvement has been recognized as a potentially effective method to deliver treatment to children with ASD and to improve sustainability of results (Matson, Mahan, & Matson, 2009). For example, an evaluation of a community-/home-based parent-implemented early intervention reported significant gains in child social communication and receptive language skills, compared to a clinic sample (Wetherby et al., 2014). Randomized controlled trials of a parent-implemented early intervention reported an improvement in parent-child communication (Green, Charman, & McConachie, 2010; Rogers et al., 2012), which was sustained in long-term follow-up (Pickles et al., 2016). Overall, interventions which target parent-child interactions within their natural environments have produced encouraging improvements in children's social communication skills and other core ASD symptoms (See Chaps. 12 and 13; Stahmer & Pellecchia, 2015; Wetherby et al., 2014). However, some studies with parent-implemented early interventions have reported less effective child outcomes compared with those implemented by clinicians (Oono, Honey, & McConachie, 2013; Rogers, Estes, et al., 2012; Stahmer & Pellecchia, 2015).

There are several possible reasons for differences in child outcomes in parent- versus clinician-implemented early interventions in existing research. These include the primary intervention approach focusing on the clinicianchild curriculum more than the parent-child implementation or being a brief, didactic parent education approach rather than a therapeutic, collaborative, comprehensive approach (Stahmer & Pellecchia, 2015). Furthermore, parent interventions aimed at very young children with ASD have not necessarily focused on teaching parents specific evidence-based active strategies for managing their children's self-regulation problems. In general, early intervention research has failed to attend to parent stress, depression, and lack of support or to report on the inclusion of fathers or other caregivers in the intervention (Dababnah & Parish, 2016a). Such approaches are needed for stressed parents of children with ASD to adhere to complex and time-intensive intervention methods (Stahmer & Pellecchia, 2015). In fact, parent outcomes, such as stress, depression, and parenting competence, are rarely measured in ASD early intervention research (Dababnah, 2016; Dababnah & Parish, 2016a, 2016b; Karst & Van Hecke, 2012; Stahmer & Pellecchia, 2015). A recent Cochrane Collaboration review reported inconclusive results with regard to reduction of parent stress in early ASD interventions (Oono et al., 2013). Clearly, there is an urgent need to develop and test more cost-effective interventions that address child behavior and parent wellbeing in families raising young children with ASD.

Evidence-based parenting programs designed to reduce challenging behavior in children with conduct problems and ADHD, as well as to improve parent stress, have been developed over several decades. In particular, group-based parent programs have been shown to improve parent psychosocial well-being, reduce stress, and build parent confidence and support networks, as well as improve children's social competence and reduce conduct problems. For example, a metaanalysis of group-based parent training programs reported significant improvements in parent depression and confidence, which were maintained at a 6-month follow-up (Barlow, Smailagic, Huband, Roloff, & Bennett, 2012). Evidencebased parent training programs also hold promise to improve the outcomes of children with ASD and their families (Brookman-Frazee, Stahmer, Baker-Ericzen, & Tsai, 2006). In one recent study (Bearss et al., 2016), a 24-week randomized trial compared parent training with parent education. Results indicated parent training was superior to parent education in reducing disruptive behavior in children with ASD, although the clinical significance of the improvement was unclear.

In this chapter, we will discuss how The Incredible Years® (IY) Preschool Basic Parent Program (IY-BASIC), an evidence-based parent training program, originally developed to prevent and treat children with conduct problems, hyperactivity, anxiety, and other social issues (Webster-Stratton & Reid, 2010; Webster-Stratton, Reid, & Hammond, 2004), was tailored and revised for parents of children with ASD and language delays. In the following sections, we outline basic content components of a newly-revised and adapted version of IY-ASD specifically targeting young children with ASD and the groupbased collaborative process and principles of delivering the program. Content and research related to the IY-BASIC and IY-ASD programs are briefly summarized.

The Incredible Years® (*IY-BASIC*) Program

The Incredible Years (IY-BASIC) Toddler and Preschool Programs targets children ages 2-5 years and their families (Webster-Stratton, 2011). Depending on whether the program is using the prevention or treatment protocols, parents meet with trained leaders in groups for weekly 2-h sessions over a 14-20-week period. IY-BASIC is based on attachment theories (Ainsworth, 1974; Bowlby, 1988), social learning theory (Patterson, 1995), social cognitive theory (Bandura, 1986), and developmental stage theories (Piaget, 1962). With a foundation of building parent-child attachment through childdirected play, parents learn strategies to model appropriate social communication interactions; coach their children's persistence, social, emotional, and academic skills; manage parent stress; stay calm while managing children's misbehavior; and broaden their support networks. Additionally, through the use of role plays, video vignettes, coaching methods, group support, and collaborative group discussion sessions, parents gain skills to challenge their negative cognitions, increase problem-solving abilities, and enhance positive communication with their partners and children. Three decades of evidence by the developer and others (Webster-Stratton, 2012a) utilizing randomized controlled trials of IY Parent Programs have pointed to improved levels of parent stress, depression, and coping skills, as well as decreased negative child outcomes such as aggressive behavior in a broad array of ethnically and socioeconomically diverse populations (Jones, Daley, Hutchings, Bywater, & Eames, 2007; Linares, Montalto, Min, & Oza, 2006; Reid, Webster-Stratton, & Beauchaine, 2001). A recent meta-analysis of 50 studies indicated positive parent and child outcomes for both the treatment and prevention protocols (Menting, Orobio de Castro, & Matthys, 2013). Cost-effectiveness analyses have also been performed with positive results (Edwards, O'Ceilleachair, Bywater, Hughes, & Hutchings, 2007;O'Neill, McGilloway, Donnelly, Bywater, & Kelly, 2013).

Several studies have been conducted to pilot IY-BASIC with parents of children with ASD and other developmental disorders (Garcia & Turk, 2007; McIntyre, 2008; Roberts & Pickering, 2010). These results indicated a reduction in child behavior problems and improved parent mental health. In a recent pilot trial of IY-BASIC with parents of preschoolers with ASD, participant acceptability and confidence was high, and parent stress was significantly reduced after completion of the program (Dababnah & Parish, 2016c). Furthermore, parents reported that the IY-BASIC program helped them address the needs of their families as a whole (including the child with ASD, other children without ASD, parents, and extended family members) and that the naturalistic, child-directed play-based nature of IY-BASIC allowed some of the participants a temporary respite from other highly structured ASD therapies. The program was flexible enough to allow group leaders to individualize content to participants' specific family and child needs, particularly addressing child emotion regulation, anxiety challenges, and sensory-seeking behaviors. Nonetheless, some aspects of the IY-BASIC program, such as program videos, time-out strategies for child noncompliance, and parent selfcare, were insufficient for some participants in the pilot trial. The parents in this research overwhelmingly requested a longer program in order to practice skills gained in the program, particularly related to parent stress and family burden. In total, these preliminary studies suggest the *IY-BASIC* program has promising implications for future use with parents of young children with ASD.

IY Autism Spectrum and Language Delays Program for Parents with Preschool Children (IY-ASD)

In order to address the specific needs of parents raising children with ASD, a new IY program was adapted, IY for Preschool Children on the Autism Spectrum or with Language Delays (IY-ASD). It was designed to complement the IY-BASIC for groups where children (2-5 years) have a mix of behavior and developmental problems. Alternatively, IY-ASD can be used independently in a 14-18, 2-h weekly course for a group of 8-10 parents with children who have ASD. In order to deliver IY-ASD, group leaders must first be trained in *IY-BASIC* and have experience with this program. They then participate in 23 additional days of training and practice with IY-ASD. It is recommended that group leaders have graduate degrees in psychology, social work, or education. Effective IY-ASD group leaders must also possess a broad understanding of ASD, including its symptoms and intervention approaches, as well as experience working with children with ASD and their families. Finally, it is critical that group leaders have knowledge of local resources in order to connect families to community supports.

One pilot study evaluating *IY-ASD* was recently published (Hutchings, Pearson-Blunt, Pasteur, Healy, & Williams, 2016), and while the sample size was small (N = 9), parent report, observational assessments, and semi-structured interviews indicated positive results. High satisfaction scores by participants supported the findings of Dababnah and Parish (2016c) with the original *IY-BASIC* program. In the revised program, parents found the video vignettes of children with ASD particularly helpful, in contrast to the earlier study with the *IY-BASIC* program, where vignettes were rated lower. Parents also reported that the group discussion and support were very useful and provided an opportunity to share problems and solutions with parents in similar situations. Results also showed significant pre-post reductions in behavior and peer problems and an increase in pro-social behavior.

IY-ASD is currently being evaluated in two sites. Preliminary pre-post analyses have found child-related parenting stress; and child irritability, agitation, lethargy, and social withdrawal significantly decreased at posttest (Dababnah & Olsen, in preparation). Acceptability was high among graduates of the program, particularly regarding the program's play-based approach, the specific skills in improving parent and child emotion regulation, and the opportunities for social support and peer learning. Participants' most common recommendation was to extend the program's duration.

Differences and Similarities with *the Incredible Years* Preschool Basic Parent Program

The IY-ASD program follows the IY-BASIC approach by focusing on developing positive parent-child relationships, building responsive parenting skills, and promoting appropriate child behavior. In addition, IY-ASD similarly focuses on reducing parent stress and barriers to participation by offering support to families such as childcare, meals, and transportation. Support can include assisting parents to access the Family Medical Leave Act (FMLA) in order to maintain employment while participating in the program. IY-ASD differs from IY-BASIC in that its content has been modified to address ASD-specific areas of emphasis (Table 17.1 compares IY-BASIC with the IY-ASD program). Based on research and direct parent feedback, video vignettes depicting parents working with their children with ASD are now available. The content has an increased focus on imitation of child behavior and use of sensory routines as a means of establishing joint attention; methods for promoting pretend play to build language, empathy, and social skills; and development of self-regulation. Due to the communication difficulties of children with ASD, parents also learn to assess and coach their child's language and social communication. Use of visual supports is demonstrated by group leaders and encouraged for all children on the spectrum.

IY-ASD emphasizes a functional approach to behavior change, and parents learn the "ABCs" of behavior change. More attention is given to the antecedents of behavior change than in the *IY-BASIC* program. Methods are introduced for identifying reasons for, or the function of, behaviors, such as obtaining preferences or escaping nonpreferences, by recognizing the antecedents (A) that set up a behavior (B) and the consequences (C) that maintain it. Then, antecedent accommodations and reinforcing consequences to promote appropriate and/or replacement behaviors are discussed, in addition to strategies to decrease inappropriate behavior.

Another key difference between IY-ASD and *IY-BASIC* is that *IY-ASD* does not present the use of time-out as a primary discipline strategy. Children with ASD often avoid social interaction. Time-out can inadvertently reinforce problem behaviors by rewarding those behaviors with escape from the nonpreferred social interaction. Rather, IY-ASD focuses on ignoring inappropriate behavior and redirecting and reengaging when the child is calm. This approach promotes attentive parenting, as parents learn to monitor child behavior during an "ignore" period and immediately reengage once the child has calmed. It also supports development of the child's emotion regulation by refraining from interrupting the child's regulatory process and by reinforcing the state of being calm.

Lastly, due to the isolation felt by many parents raising a child with ASD, increased emphasis on support and network building is critical. Parents of children with ASD often report being unable to take their children into community settings due to their behavior. *IY-ASD* promotes relationships with other families experiencing similar circumstances and networking to build understanding of ASD within the community and to increase advocacy for resources. Children with ASD also often require time-consuming and

Table 17.1 How HEASD differs from basic 1.	r parenting program
<i>IY-BASIC</i> preschool program (3–5 years)	IY Autism spectrum and language delays program (2–5 years)
Topics1. Strengthening children's social skills, emotional regulation, and school readiness2. Using praise and incentives to encourage cooperative behavior3. Positive discipline: Rules, routines, and effective limit setting4. Handling misbehavior (ignoring, time-out, consequences, and problem-solving)	 Topics 1. Increased focus on coaching language development, imitation and sensory routines, social communication, use of pretend play to promote empathy and social skills, and promoting self-regulation skills 2. Enhanced focus on self-care and building support group 3. Older (4–5 years old) verbal children with conduct problems: Families can continue with program 4 of basic <i>IY</i> program to discuss time-out and problem-solving (not included in <i>IY-ASD</i> program)
Basic <i>IY</i> vignettes Program dosage (18–20 sessions)	New <i>IY-ASD</i> vignettes depict children with ASD. Additional vignettes from basic <i>IY</i> may be added if parents in the group need more help with behavior management and problem-solving (14–18 plus sessions) increased dosage often needed to adequately cover the material since there are more practices and discussions to tailor the strategies to each unique child
Group size: 10–12 parents	Smaller group size: 6–8 parents plus partners or other family members
Group leader: Knowledgeable in child Development	Group leader: Knowledgeable and experienced in ASD practice, local ASD-specific supports, and functional approaches to behavior change
Key group teaching/learning methods (behavioral practice, principle building, values exercises, tailoring to meet cultural and developmental issues, home activities)	 Increased teaching about ASD and ways to use visual support including picture schedules, choice cards, command, and feeling cards Tailoring group practices according to children's communication stage; imitation as a means to gain attention, learning alternative incentives to motivate children with ASD (e.g., sensory activities) More explicit teaching about prompting, use of nonverbal signals, and the functions of behavior and ABCs of behavior change More practice with use of pretend play and puppet use as well as self-regulation strategies
Alliance-building techniques (collaborative learning, buddy calls, weekly leader support calls, praise to parents, incentives for parents)	All standard alliance-building techniques apply to this population but increased efforts to help build families support systems and reduce their stress by working on self-care and promoting weekly buddy calls and peer dates with other parents. Regular emails, texts, and calls from group leaders are essential
Food, transportation, daycare	No adaptations needed but essential to offer these for this population in order to reduce barriers to participation
Core model does not offer home visits	Providing home visits to coach parent-child interactions using coach home visit manuals and additional DVD vignettes as needed; use these to make up missed sessions or show additional vignettes or do coached practice with the children
Core model does not address collaboration with educators and other professionals for coordination of care	Coordinate with educators and therapists for developing behavior plans with agreed upon goals for child's target behaviors. Consult with medical providers to understand effects of medical issues on child behavior and parent stress
Core model suggests use of IY advance, child, and teacher programs for children with diagnoses or very high risk families	Consider additional IY programs: Advance program to teach anger and depression management and problem-solving steps Child social, emotional and problem solving skills program ("dinosaur school") offered alongside parent program Offer follow-up training in the <i>Helping Preschool Children with</i> <i>Autism: Teachers and Parents as Partners</i> to help parents learn how to promote positive peer interactions and social communication with 2–3 children

 Table 17.1
 How IY-ASD differs from basic IY parenting program

costly neurodevelopmental and medical interventions. Parents need support to advocate for and provide these therapies to their children. Group leaders must be knowledgeable about community resources and assist families in accessing them both during and after the program. Efforts to coordinate care among educators, therapists, and medical providers are also essential.

The Incredible Years Program Content

This section briefly summarizes each of the eight parts of *IY-ASD*, with some examples from the video vignettes and the rationale for the content with this population. In addition, the foundational principles of the program are discussed, such as the importance of the collaborative process and building family support networks to reduce family stress.

Part I: Child-directed narrated play promotes positive relationships All Incredible Years® Parent Programs have at their foundation childdirected play. This is important because young children's key language, social, and emotional learning come from watching, imitating, and interacting with parents. However, children with ASD are often more interested in interacting with nonsocial objects than with people. Therefore, parents learn how to increase their children's attentional focus with them by following their interests, getting into their attentional spotlight, and making their play interactions more rewarding. By linking the child's favorite activity to social interactions with parents, the child will be more motivated to interact with them (Ingersoll & Gergans, 2007; Rogers & Vismara, 2008; Sussman, 2012). Thus, the parent can facilitate joint play and create more opportunities for their child to learn from them.

Children with ASD often exhibit atypical or unconventional play behaviors (e.g., repetitive or nonfunctional play). Their sensory needs may influence the way they play, and they may chew or smell toys, rub them against their face, or repetitively line them up in rows to make a pattern and become upset if someone tries to move

them. For this reason, parents must develop several strategies to engage their children in interactive play. Parents learn to follow their child's lead and utilize his or her interests during play and to describe and comment on the child's actions. Key concepts in Part I of *IY-ASD* include engaging in child-directed play, narrating and imitating play, waiting for the child to indicate choice, considering positioning for face-to-face interaction, encouraging verbal and nonverbal communication, and modeling and prompting play behaviors and language. The concepts are individualized using parents' observations of their own child's play and language skills, preferred activities, and what seems to motivate their children. Parents share their children's favorite toys and foods, any hyper- or hyposensitivities (e.g., sights, sounds, touch, and smells), and what kinds of physical or sensory routines they enjoy (e.g., running, jumping, hide-and-seek games, spinning, songs). This group-sharing process helps parents see similarities and differences in their children's sensory preferences, and parents begin to develop a support group around their children's shared experiences.

Part II: Pre-academic coaching promotes language development and school readiness After parents have learned how to get into their child's "attention spotlight" by being child-directed and using descriptive commenting, imitation, and modeling, in Part II they learn another type of descriptive commenting called pre-academic coaching. This coaching method is used for children who have begun communicating with gesback-and-forth tures. sounds, and some exchanges. In essence, parents learn to turn up the volume of their communication and attention by describing pre-academic concepts such as colors, shapes, names of objects, sounds, numbers, and positions during play. For children with no language, parents incorporate pictures of objects, shapes, colors, sounds, and actions to communicate the concepts. The use of visual supports is encouraged for all children to support both expressive and receptive language development. Additionally, visual supports can promote child engagement, making choices, and understanding

of routines or expectations. Group leaders can provide parents with tailor-made books with targeted pictures illustrating such things as a child's favorite toys or activities (e.g., train, blocks, bubbles), actions (e.g., sit, play, read, tickle), common routines (e.g., wash hands, eat dinner), clothing (e.g., hat, coat, shoes), or food items (e.g., apple, cereal).

Children with ASD often get frustrated when their pattern or routine is disrupted, or they are trying something new. They may also become frustrated about their inability to communicate or be understood by others. They may give up easily and revert to solitary play or repetitive actions that are more comfortable. In Part II, parents learn a second type of coaching called persistence coaching that is used to help scaffold a child's ability to stay focused and persist with a difficult learning activity, even when frustrated or anxious. Parents name the child's internal state when she/he is being patient, trying again, staying calm, concentrating, persisting with a challenging task, or trying to engage in joint play. Parents explore how to support their children to persevere with tasks such as brushing their teeth, getting dressed, doing a puzzle, looking at a book, or initiating an interaction. Pairing preacademic and persistence coaching, along with engaging in a child's favorite activities, is intended to expand children's communication abilities and improve school readiness.

Part III: Social coaching promotes friendship skills The ability to share, ask, help others, wait, initiate interactions, and take turns is fundamental to social development and social communication. Yet, these social behaviors are more difficult for children with ASD. The ability for these children to cooperate in give-and-take exchanges is difficult because they are far more interested in exploring their own nonsocial object and often do not have the language to ask for a turn. They may even be unaware of another child's desire for a turn or need for help, because they are less tuned into subtle communication of others' eyes, face, gestures, and tone of voice. The risk is that these children will continue to play alone, rather than draw others into their activities. This means that they will miss important learning opportunities provided from parents or peers in joint play. In Part III, parents learn to use *social coaching*, modeling social skills and prompting social communication in their play interactions. Parents learn how to help these children shift their attention from objects to other people by spotlighting others' needs and activities. Social coaching builds on the content in Parts I and II. Given the common challenges, children with ASD have with regard to social communication; this part of the program is one of the most complex. The major learning goals of this part of the program are:

- Using play and books, gesturing, prompting, and modeling to promote turn-taking skills.
- Introducing parents to the "ABCs" (antecedent, behavior, consequence) and function of a behavior. An example of teaching this concept is provided in Box 17.1.
- Increasing children's enjoyment of social interactions through shared sensory activities (e.g., dancing, bouncing on a trampoline, swinging).
- Prompting and enhancing face-to-face joint attention.

Parents learn how to use social coaching during play interactions with their child to encourage critical social skills. They learn that the same principles used during child-directed play can also be regularly used with daily family life routines, such as getting dressed for school and toilet training.

Box 17.1: Teaching Parents the ABCs of Social Behavior Change

The group leader shows parents a vignette of a father engaging his son's attention by playing with a red balloon, one of the boy's favorite games. This shared activity appears to be light-hearted play, but serious learning about social interaction is taking place as the child learns to ask for a turn, share, listen, and communicate with his father. First, the father holds the balloon next to

Box 17.1: (continued)

his face to capture his son's attention and gain eye contact. Then he waits for his son to use his words to ask for what he wants. Holding up the prized balloon, which he knows his son will want, is the antecedent (A) that precedes the behavior the father wants to encourage. Once he gets his son's attention, he models and prompts the verbal requesting behavior he wants his son to learn by saying, "You can say, I want the balloon please." When the father gets the desired behavior (B) from his son, his verbal request, the father rewards his use of verbal or nonverbal language by giving him the balloon and praising his verbal request, which is the consequence (C). These are the ABCs of how parents turn a play interaction into a social communication learning opportunity. The function of the behavior is also discussed, which in this case is the child's desire to obtain a preferred object. After the video vignette has been paused several times for group discussion, the group leader sets up practice experiences with parent dyads, where one parent acts as their child, while the other is the parent using the ABC learning steps. Several more vignettes are shown to illustrate these interaction sequences, and then parents are given home activities that include completion of an ABC chart regarding their efforts to create a social learning opportunity during their play times.

Since children on the spectrum often enjoy sensory physical activities such as throwing and catching a balloon, dancing to music, bouncing on a trampoline, being chased, and swinging, parents learn how to use these motor play experiences to increase their children's internal motivation to play with them and create social coaching opportunities. As seen in the balloon example above, in order to prompt and enhance face-toface joint attention, parents learn how to get into their child's attention spotlight (showing balloon) and motivate them to shift their gaze from objects to people and back again. By watching the video vignettes, parents learn the value of exaggerated facial expressions, getting down close to their child's face, making eye contact, prompting or modeling the desired behavior, and waiting for a response before giving the child what he wants and rewarding this behavior.

Part IV: Emotion coaching promotes emotional literacy In Part IV of the program, parents learn the importance of drawing attention to their child's feelings by using emotion coaching. This is helpful for all young children but especially for children on the autism spectrum. While children with ASD experience the full range of feelings, they often find it hard to share their emotions with others through language, facial expressions, or gestures. Parents start this coaching by naming their children's emotions at the time their child is experiencing them, which helps the child link the feeling word with an internal emotional state. The goal is for children to develop a feeling vocabulary, recognize their own feelings, and share them with others. The ultimate aim is for children to be able to recognize and respond sensitively to others' feelings. Moreover, supporting a child's emotional language eventually contributes to the development of emotional self-regulation, empathy, and secure attachment.

IY-ASD demonstrates several ways for parents to begin to build their child's feeling literacy. One method is through the use of pictures of feelings faces (e.g., mad, happy, excited, calm, frustrated), which children use to indicate their emotions. Parents learn the importance of describing and naming the feelings of book characters to help their children learn feeling words. Reading face to face also gives parents the opportunity to make eye contact and to model facial expressions and gestures or sound effects to represent the emotions they are naming. Parents learn to use social coaching in combination with emotion coaching, for example, taking turns when reading to point out a picture and using a partial prompt by pausing to let the child fill in the answer. Finally,

physical games (e.g., water play, spinning) can be used to motivate a child's feeling vocabulary. Coaching children's unpleasant emotions is tricky because giving excessive attention to negative emotions can make the child more angry, frustrated, fearful, or sad. Therefore, parents are encouraged to give more attention to naming the "positive opposite" behaviors such as feeling calm, patient, brave, or happy. Parent's naming of uncomfortable feelings is paired with persistence coaching such as a positive coping statement. For example, saying, "You are frustrated getting those shoes on, but you keep trying. You can do it." When emotion coaching is done skillfully, this can strengthen a parent's relationship with their child and help the child feel understood. In total, these emotion coaching methods can be incorporated into parents' efforts to engage in positive, child-directed activities with their children.

Part V: Pretend play promotes empathy and social skills For young children with ASD, the world of pretend play does not always emerge naturally. In this part of the program, parents learn how to encourage their children's imaginary play skills. Studies have shown that when a child with ASD develops pretend play, his language abilities and social skills also increase (Rogers, Dawson, & Vismara, 2012). Pretend play with parents helps the parent and child engage in a shared experience, opens the door for powerful learning opportunities, and helps the child learn what others are feeling and thinking.

Group leaders help the parents discuss how to use pretend play to encourage empathy, emotion language, and social behaviors such as helping, sharing, waiting, and trading. The use of puppets, dolls, or other figures is another effective way parents can encourage children's imaginary play. In one video vignette, a boy has become so attached to his turtle puppet that the boy wants to take the puppet spinning with him. The father effectively builds his son's empathy and language skills by stopping the spinning game periodically to talk together about how the turtle is feeling while they are spinning. Because the boy is highly motivated to spin, stopping the spinning

forces the child to verbally communicate and interact with both the turtle and his father. In another vignette, the mother uses a baby dinosaur puppet to express feelings of shyness and fear of coming out of his shell. The mother prompts her daughter with the words to help the puppet feel safe to come out and play. The mother models a gentle, friendly behavior, which leads the little girl to use more positive behavior that is reinforced by the mother. If a child does not have the language skills to respond verbally to the puppet, it is still good for the puppet to model the words involved in the social interaction. Parents can also structure interactions that involve nonverbal responses from their child (such as "Would you like to shake the puppet's hand?"). Echolalic responses also receive attention, rephrasing, and praise, as parents learn to reinforce successive approximations of desired behavior.

Part VI: Promoting children's self-regulation skills One of the major developmental tasks for all preschool children is to learn to manage their anger and develop emotional self-regulation skills. In Parts IV and V, parents have learned how emotion coaching, puppets, and pretend play can be especially helpful to gain their children's attention and build their emotion vocabulary. Once children are able to recognize and express their own feelings verbally, or with pictures and signs, then they can begin to understand feelings in others and express their own.

As emotional literacy and empathy slowly develop, parents can begin to teach children some self-calming strategies. Because children are visual thinkers, it continues to be effective to use pictures, books, puppets, and coaching methods discussed earlier in the program. In Part VI, parents learn scenarios designed to help children use visual tools such as a "calm down thermometer" and practice self-calming strategies such as positive imagery, self-talk words, and deep breathing. For example, parents view a video vignette where a father is helping his child learn about breathing by practicing taking big breaths while visualizing smelling a flower and blowing out a candle. This imaginary visualization, also shown on a picture cue card, helps children to stay calm and remember how to take deep breaths. Because this father has previously spent a lot of time teaching his son emotion vocabulary, he is ready to support his son to learn what the boy can do when he experiences feelings of anger, sadness, frustration, and anxiety. When the boy looks at another picture, he repeats the breathing strategy, and the father helps him understand how it helps him feel calm.

Part VII: Using praise and rewards to motivate children Children on the autism spectrum may seem unaware or less interested in their parent's pleasure, approval, or praise in response to what they say and do, signals that normally motivate most children. In this part of the program, parents learn they cannot be subtle or vague with praise; rather praise must be put in the spotlight by being more attractive, exciting, and clear for positive behaviors. Parents discuss methods to enhance praise with a warm tone or enthusiasm, smiles, eye contact, as well as gestures or specific language. For example, one of the vignettes shows a boy who has been rather aggressive with his cat. His parents give him attention and labeled praise whenever he is gentle with his cat in order to teach him what it means to be gentle. They help him understand the connection between his being gentle and the cat's happiness and willingness to stay with him. Their use of effective praise helps this boy develop empathy for his cat and understanding that his gentle behavior results in more positive consequences for himself.

Parents also learn how to add to the impact of praise by pairing it with tangible rewards such as their child's favorite stickers, bubbles, or special food items. Other powerful motivators are sensory physical activities such as spinning, running, jumping, chasing, riding on a parent's legs, or being tickled. These activities can be used as a reward for practicing a social communication skill or for using some self-regulation calming strategies.

Finally, the group leader helps parents learn how to praise and reward themselves and other family members for their parenting efforts. The leader starts group sessions by asking parents to

share their successes and to think about how effectively they handled a particularly difficult situation. Parents learn how to formulate positive statements about themselves and to compliment each other. The group leader helps parents set up tangible rewards for their efforts, such as dinner out with a spouse or friend, a hot bath, or a good book, and encourages them to reward themselves for achieving their weekly goals. Prizes are given out at this session for parents completing their home assignments, which include self-care items such as bubble bath, chocolate, lotion, and gift certificates. This promotes a sense of parenting competence, helps parents reframe their experiences by focusing on positive aspects of their interactions and effort, and encourages the development of positive self-talk.

Part VIII: Effective limit setting and behavior management By this stage in the program (group session 11 or 12), parents have been encouraging and motivating their child's interest in pleasing and being with them through their use of child-directed play and engaging rewards. Parents have been learning and practicing the ABCs of behavior change and applying it to the goals they have set for their children. But just like any other child, at times a child with ASD will be defiant and refuse to comply with a parent's requests or prompts. Parents learn that children are not deliberately misbehaving but actually are biologically programmed to explore and test the limits as part of their development. This exploration stage is thought to help children develop a sense of independence and eventually selfcontrol, both of which are goals for most parents. Moreover, for children with ASD and limited language, their resistance may stem from the fact they do not actually understand the parent's verbal instructions because the request is too complex or unclear.

In the final part of the program, parents learn ways to:

- Give positive, clear, simple, and necessary limits or instructions verbally and nonverbally.
- Transition their children to new activities using visual-auditory tools (such as buzzers,

music, sand timers, and songs), command cards, and positive reminders.

- Utilize proactive discipline approaches such as distractions, redirections, self-regulation prompts, and ignoring selected misbehaviors.
- Understand the principle of "differential attention."

Most parents need to give children extra time to understand what is happening and what they can do or say. Slowing down the pace is a key behavior management principle. Discussions of the function of behavior show how behavior is a means to an end. It is critical to identify whether a behavior is motivated by attention-seeking, a desire to obtain a favorite object or activity, an escape from something nonpreferred, or a sensory stimulation, in order to promote appropriate behaviors that meet the child's needs.

The Incredible Years Program Principles

The Incredible Years (IY) series are guided by a set of principles that allow parent programs to be flexible enough to permit adaptations for given family and cultural situations, parent skill levels, and children's developmental and communication abilities. The following section summarizes each principle and how the group leader uses each principle to support parents.

Principle 1: The Collaborative Model

The core value driving the *IY* program is that work with families should be experiential, selfreflective, and collaborative. In the collaborative model, the group leader does not set him/herself up as an "expert" dispensing advice about how caregivers should parent more effectively. With the root meaning of "to labor together," collaboration implies a reciprocal relationship based on utilizing equally the group leader's expertise and the parents' knowledge, strengths, and perspectives of their own children's communication and relationship difficulties (Webster-Stratton, 2012b). For instance, during *IY* sessions the group leader invites parents to share their experiences,

thoughts, and feelings and engage in problemsolving. The collaborative group leader style is demonstrated by open communication patterns within the group and an attitude of acceptance toward all the families. By building a relationship based not on authority, but on group rapport, the group leader creates a climate of trust. The goal of this approach is to make the group a safe place for parents to reveal their problems and worries, to risk trying new approaches, and to gain support. The collaborative group leader is a careful listener and uses open-ended questions when exploring issues. In the leader's manual, there is a list of suggested open-ended questions for each vignette shown. Some example group leader questions include What is effective about this parent's approach with his child? What are the benefits for his child? What is this child learning? What would you do differently? Can you use this approach with your child? Let's try it. During the discussion, the group leader encourages all parents to respond and records their key ideas on a flip chart and even at times, gives a parent credit for a "principle" when sharing an important idea or concept. The group leader's empathy is conveyed by the extent to which she/he actively reaches out to parents, elicits their ideas, listens reflectively, affirms positive steps taken, and attempts to understand parents' challenges.

The collaborative process can be effective for parents raising children with ASD for several reasons. This approach gives back respect and selfcontrol to the parents who, because of their children's difficulties, can be in a vulnerable time of low self-confidence and intense feelings of guilt and self-blame. A collaborative approach is more likely than didactic approaches to increase parents' confidence and self-efficacy, as well as their engagement and motivation for change (Webster-Stratton, 2012b). The group leader works with each parent to adapt concepts and skills learned in the group session to their particular situation. This flexibility increases the likelihood that the skills learned during the group will generalize into home practices in a way that fits with each parent's skill level, values, and the specific needs of their children. For more details on the collaborative group leader process, see the

book *Collaborating with Parents to Reduce Children's Behavior Problems* (Webster-Stratton, 2012b), which is the text group leaders receive during the training.

Principle 2: Start with Parents Assessing Their Child's Stage of Communication, Setting Goals, and Self-Monitoring Progress

In the first group session, parents share descriptions of their children's strengths and difficulties and identify their long-term goals. These goals are written on flip charts and posted on the wall and can be changed over subsequent weeks if parents recognize their goal is unrealistic or another goal is more important. Also in the first two sessions, parents actively self-assess what they believe is their children's present communication stage by completing two Child Communication Checklists, focused on childparent and child-peer communication skills, respectively. For example, parents are asked to identify their children's communication abilities (e.g., using pictures rather than words) and behavioral challenges (e.g., lack of response to directions). It is important to help parents think about how, why, and when their children communicate (e.g., child is requesting something, is protesting, is using sounds or words to calm down or express feelings). Children may communicate primarily to get what they want or may function at a more advanced level to ask and answer questions, socialize, and engage in pretend play. Once parents complete the checklists, group leaders help them set realistic goals for their children and family. For example, if a child ignores the parent whenever the parent offers a choice, then the goal will be for the parent to identify ways to get into their child's attention "spotlight," so the child can attend to the request. On the other hand, if a child responds to a parent choice with eye contact or gestures, then the parent's goal may be to use pictures or other signs to encourage further communication. Parents' understanding of their child's present stage of communication and social abilities is important. Through this process, group leaders can assist parents to set

realistic goals and provide the kind of coaching that suits their child best.

Over subsequent group meetings, the group leaders continue to reevaluate the communication checklists and set new goals with parents. This process helps group leaders to individualize each week's program content and select the most appropriate video vignettes for particular parents, as well as to set up tailored practices that address the specific communication and play-related challenges faced by each parent. As the program continues, the group leaders help parents develop plans that target specific parenting strategies toward a particular child's behavior and communication goals.

Principle 3: Build Parents' Confidence and Self-Efficacy

Given the connection between knowledge, efficacy, and behavior, increasing parent confidence and self-efficacy is a major principle of the IY program (Bandura, 1977, 1982, 1989). The collaborative partnership between the parents with each other and with IY group leaders empowers parents to celebrate success and support their knowledge and skill acquisition. IY group leaders utilize an array of strategies that focus on parent strengths and emphasize the positive. For instance, embedded in the collaborative process is the strategy of group leaders asking probing questions that promote parents' self-reflection and problem-solving and giving them time to discover the rationale for a specific strategy. Parents feel empowered by this process and the opportunity to learn from each other and share ideas. Additionally, group leaders recognize and praise parents' achievements from completed home activities. These achievements are shared and celebrated in the group, and sometimes parents are asked to demonstrate a particular strategy that worked well for them. Further, group leaders reward parents for reaching personal weekly goals and completion of home practice exercises with prizes (e.g., special stickers, balloons, bubbles), all the while building self-efficacy and modeling a host of strategies the parents are being trained to use with their children.

Principle 4: Address Parents' Cognitions, Emotions, and Behaviors

IY targets the link between thoughts, emotions, and behaviors (Bandura, 1989). For instance, parents who have worked for months with a challenging child on the autism spectrum with limited success may have developed very negative views of the child. Frequent thoughts, such as "He's doing that just to irritate me," "Nothing I try is working," and "He is never going to change," make it likely that the parent will have negative feelings and antagonistic interactions with their child. These feelings can also influence parents' interactions with others, such as the child's teacher, who parents may believe is not qualified to work with their child. Parenting stress, limited access to resources, and lack of support may lead to parental depression and low motivation to implement effective new strategies offered during the parent groups. Likewise, negative perceptions of their own ability to manage their frustrations (e.g., "I'm going to explode!") produce unproductive internal dialogues that will undermine nearly any intervention unless these are systematically addressed.

The IY Parent Program directly addresses these self-defeating thoughts and the emotions and behaviors they engender. Group leaders work with parents to reflect on their internal dialogue bringing negative thought patterns to light and encourage parents to develop positive coping mechanisms. This can include group activities designed to challenge and rewrite specific negative thoughts, to use positive imagery about successful implementation of new practices, and to practice simple coping messages and calm down breathing throughout the day. For example, one session activity includes breaking the group up into parent buddy pairs to work on a record sheet that lists negative gripes and asks parents to rewrite them with positive statements or coping thoughts. Another activity asks them in pairs to share calm down strategies they can use in problem situations. After this buddy sharing, the group leader asks the group to share these ideas with everyone and records them on the flip chart. This flip chart list can be added to in subsequent sessions as new self-talk scripts or strategies are discovered. IY weekly group meetings provide opportunities to practice these self-talk strategies through role plays. For example, a parent may be practicing how to ignore a child who is tantruming, and another parent will act as the "angel on her shoulder" giving her the positive thoughts to use while she is ignoring this defiant behavior. After this practice the group leader solicits positive feedback from other parents as well as giving encouragement herself. Furthermore, the safe, supportive group atmosphere where other parents are facing similar difficulties, thoughts, and feelings normalizes their experience and provides the parent with opportunities to express emotional challenges with others while learning new strategies for coping.

Principle 5: Video Modeling, Mediation of Vignettes, and Self-Reflection

Observation and modeling can support the learning of new skills (Bandura, 1986). This theory suggests individuals can improve parenting skills by watching video examples of other parent-child interactions that promote their children's social communication and interactions and decrease inappropriate behaviors. IY-ASD video vignettes depict four different children on the autism spectrum. All are the same age but have very different developmental abilities. One boy has limited language, uses echolalia frequently, flaps his hands, and often responds with a blank stare or ignores the parent's choices offered. Another girl has quite a bit of language but at school does not initiate interactions with peers, plays alone, and can be oppositional at home. Another boy has no language and is shown in a classroom throwing tantrums. The fourth boy has one- to two-word language skills. All vignettes show mothers or fathers interacting with their children during play or snack time. The majority of vignettes depict one-on-one play, with a few additional vignettes incorporating siblings in the interactions. The parents are shown using a variety of strategies to gain their children's attention and promote their children's social communication and emotion regulation. The vignettes are intended to trigger group discussion, self-reflective learning, and

practices to reenact vignettes using some of the suggested strategies.

Before the group leader shows a vignette, she/ he begins by helping the parents understand what they are about to see and what they should look for when they watch the vignette. For example, the group leader might say, "In the next vignette, see if you can determine why this parent is effective and what her child is learning." While the group leader is showing the vignette, she/he pauses the video at various points to give parents a chance to discuss and react to what they have observed. Sometimes vignettes are paused two to three times to encourage parents to reflect on or even practice what they would do next. The group leader asks open-ended questions such as, "Why do you think singing gets your child's attention and promotes language development?" Suggested questions and discussion topics are included in the group leader's manual. If parents are unclear about the specific strategy, or have missed a critical feature of the vignette, the vignette can be shown again. The goal is not only to have parents grasp the intended concept but also to ensure parents become actively involved in reflecting on the interactions, problem-solving, and sharing ideas. The group leader promotes integration and relevance of the concepts or behavioral principles by asking how the concepts illustrated in the vignettes do or do not apply to their own interactions with their child at home. For example, "Do you think could use a puppet at home with your child to enhance your interactions? What kind of puppet would you use? Would this be difficult? How will your child react?" After several of these vignettes are shown and discussed, then a puppet practice is set up.

It is important to emphasize video vignettes are used collaboratively, as a catalyst to stimulate group discussion and problem-solving, not as a device that renders parents as passive observers. Parents' reactions to the vignettes and the ways in which they process and interpret what they see on the vignettes are more important than what is actually shown on them. The vignettes are designed to illustrate specific concepts, and it is up to the group leader to ask questions that permit parents to self-reflect and discover the key behavior management or communication principle and how this can be used with their child. For example, a group leader may explore a principle arising from a vignette such as prompting a child's verbal response and then ask the parents, "How do you see yourself prompting some of the social skills you have identified on your goals list at home with this idea?"

Principle 6: Experiential Practice Learning Methods

IY parent training places a major emphasis on experiential learning such as role-playing scenarios, rehearsal and practice of newly acquired behaviors and cognitions, rather than simply didactic instruction. A group leader might believe from the discussion of the vignette that parents understand the behavior management principle or content. However, until the parent is seen "in action," it will not be clear whether she/he can put the ideas into real-life behaviors. There can be a discrepancy between how participants understand a strategy and how they actually behave. It can be very difficult for parents to think of the right words to use with children and manage angry thoughts and stressful or depressed feelings when children misbehave or fail to respond. Role play or experiential learning is effective because it helps parents anticipate situations more clearly, dramatizing possible sequences of behaviors, feelings, and thoughts. It helps them to rehearse behaviors, practice staying calm, use positive self-talk, and get feedback from the group about their skills.

It is recommended that group leaders set up three to four brief role plays in each session. During weekly sessions, parents are first given the opportunity to discuss several vignettes of a new parenting skill, such as social coaching. Their ideas and social coaching scripts have been recorded on a flip chart. Then, the group leader sets up a large group practice by inviting a parent to demonstrate implementation of the new skill learned (such as coaching of emotions or social skills, prompting, and using picture cards) with another parent who plays the role of "child." Or, one of the group leaders using a large child-size puppet can act the part of child with no language and/or with echolalia. Afterward, the group debriefs and gives positive feedback to the parent for the particular skills she/he was demonstrating, such as imitation, prompting, gesturing, or picture cards. The parent "in role" as child also gives feedback from the child's perspective of her experience and finally the group leader summarized the key learning that came out of the practice. Sometimes replays occur, trying out different ideas from the group. Putting parents in the role of the child can be very helpful not only to learn parenting skills but also to help parents experience the perspective of their child and to show what their child does.

Once the large group role play or practice has been demonstrated and debriefed, has roleplayed or practiced, the parent group is divided into triads, so everyone can practice the particular skills being covered in the session. During these practices one person is parent, one is child, and the third is observer who watches the interaction and offers suggestions and support as needed. At the end, the observer parent gives positive feedback for the skills she/he observed. Then the triad members change positions. It is important that all parents have opportunities to practice. At the end of these small practices, the triads report the key ideas learned from this experience back to the larger group. The IY manual recommends some planned role plays, but group leaders are encouraged to do spontaneous practices. For example, a parent might say, "My child doesn't let me touch his line of cars in play or let me change anything." This is the strategic moment for the group leader to do a spontaneous role play and ask that parent to demonstrate her child's behavior. The group leader then chooses another parent who seems to have an understanding of how to enter into play even when she feels rejected by her child by showing how she/he would respond to this rejection. The group leader can prompt the parent in role to keep back some cars and set up the ABC sequence, so the boy has to ask for each car and engage in joint play. While parents are often nervous about role plays and may resist at first, our weekly evaluations indicate that over time, parents find the role plays one of the most useful learning methods and frequently request to act out certain situations. Parents report role plays help them prepare realistically for what occurs at home. Here are a few group leader tips to setting up successful role play practices:

- Do large group practices before small group practices. This allows participants to observe exactly what you expect them to practice in small groups.
- Remember you are the "director" of the role play and get to choose actors, set the stage, and determine the script or roles or props needed.
- Scaffold large and small group practices and remember you can always pause action to give feedback and replay if needed.
- Be sure you have covered the content to be practiced first and have developed a script before practice begins.
- Start with simple role-play first (with wellbehaving child) to practice and learn parenting skill, and then add complexity by changing the difficulty of the child's response.
- Tailor the parenting skill to be learned according to child's developmental and communication level. Ask parents to role-play what their children would do and practice possible responses.
- Make practices fun and relevant to their personal situation.

Principle 7: Buddy Buzzes and Brainstorms

In order to keep all parents actively involved in self-reflective experiential learning, build relationships among parents, differentiate activities, and manage time during the group sessions, group leaders frequently do buddy "buzzes" and brainstorming exercises. Buzzes are when parents are paired up with a buddy to work on a specific exercise such as writing praise statements for their targeted "positive opposite" behavior (i.e., replacement behavior for negative behavior), sharing calming strategies or self-care efforts, or rewriting negative thoughts into positive coping thoughts. These exercises contribute to the shared experience of raising a child with ASD and allow for further individualization of the program to specific child and parent needs. The benefit of doing a paired buzz instead of a group brainstorm is that every parent is immediately engaged in a task and involved in coming up with solutions. While large group brainstorms can be beneficial as well, they can be less effective than buzzes as perhaps only half the group contributes ideas, and the other half is disengaged, quiet, or distracted. After these buzzes (3–5 min), each buddy can report to the group on their buddy ideas, and these are recorded on the flip chart by the group leader. Buzz handouts are also included in the group leader manual for use in these exercises.

Principle 8: Weekly Home Activity Practice Assignments and Self-Monitoring Checklists

Parents practice the strategies they are learning first in the group with other parents and subsequently at home with their children. They are asked to record their experiences with these activities on record sheets that can be found in the IY manual. For example, in the first part of the program, parents identify play behaviors they want to increase, such as imitation, use of choice activity boards, being child-directed, and descriptive commenting. They record a brief script of their practice on the record sheet and how their child responded. Parents return these records at the subsequent group session for the group leader to review and help parents fine tune their approaches with further role plays as needed. The record sheets can also assist group leaders to assess parents' understanding of program content and their success at applying these ideas with their children at home. For parents who are having difficulty using these approaches, it can be helpful to set up some additional parent play sessions with their children where they receive individual coaching from the group leader. In addition to home practice assignments, parents are also given The Incredible Years book or Incredible Toddler book (Webster-Stratton, 2011) and asked to read or listen to a chapter each week to prepare for the subsequent session.

Although standard home assignments are suggested, each week parents complete the selfmonitoring checklists, which allow them to commit to what aspect of the home activities or goals they will try to achieve. Each week the group leader reviews these goals and gives parents personal written feedback, as well as placing surprise stickers, candies, cartoons, or cards in their personal folders to applaud a particular achievement. These personal folders become a private communication between the group leader and the parent. The individual attention to the home assignments encourages parents to selfmonitor their own progress.

Principle 9: Reviewing Weekly Evaluations and Making Calls

At the end of every group session, parents complete brief weekly evaluation forms. This provides the group leader with immediate feedback about how each parent is responding to the group leader's style, group discussions, the content, and video vignettes presented in the session and the role play practices. The evaluations bring to light a dissatisfied parent, a parent that does not see the relevance of a particular strategy for their child, or a parent who wants more group discussions or vignettes or practices. The group leader calls or meets with parents individually to resolve issues and ensure the program is addressing their goals. At the end of the program, the entire program is evaluated. This information is helpful for identifying parents who may need further help.

Principle 10: Building Parents' Support Team

Parenting is stressful at times for most parents, but research indicates that parenting a child with ASD is associated with significantly elevated depression and anxiety symptoms and disorders (see Introduction). Parents of children on the spectrum experience a sense of being stigmatized and socially isolated from others. Parents often do not feel they can share the burden of the many decisions they make each day and fear if they are honest with their friends about their child's strange behaviors; they will be met with misunderstanding, indifference, or outright rejection. Struggling to get support services, relentless worry about the future, and financial strain all can be overwhelming. The group leader's role, then, is to facilitate the parent group so that it serves as a powerful source of support: an empowering environment.

The collaborative learning process allows parents to problem solve together, to express their appreciation for one another, and to learn to cheer each other's successes in tackling difficult problems. The group leaders encourage parents to curb negative thoughts, use positive imagery, take deep breaths, get enough sleep, and develop support systems to stay calm. For example, in Part VI, when children are learning the calm down breathing techniques, the parents also learn how these techniques can be applied to themselves. In Part VII, on the topic of praise and incentives, leaders explore self-reinforcement and self-care with the group, another important strategy for reducing stress. One of their home activity assignments is to do something pleasurable for themselves (e.g., coffee with a friend, date night out, massage, exercise class, etc.) which they share the following week. It is important to help parents understand the importance of self-care in terms of refueling the energy required to care for their children. Weekly calls from group leader also help parents feel supported as they try out new parenting strategies. Group leaders help parents become support systems for each other. Each parent is paired with a "buddy" from the group, to allow parents to support one another outside of the weekly group sessions, process challenges and successes, and share ideas and experiences generalizing IY skills at home. Throughout the program parents are given weekly assignments to call or contact their buddy to talk about the new skill they are trying out. Parents can make these weekly contacts in a variety of ways: texting, email, web groups, phone calls, or meeting in person. Initially parents may be hesitant about making these calls but become more confident as they receive support from other parents. Buddies are changed at least once during the program so that parents can benefit from other parents' insights. These assignments further expand the parents' support networks, as they usually express a desire to continue calling their previous buddies.

In addition to building the support system within the group, the group leader also helps them build support within the extended family. Parents often report conflicts with partners, grandparents, and teachers over how to handle the child's problems, resulting in stressed relationships. Every parent is encouraged to have a spouse, partner, or family member such as a grandparent participate in the program with them to provide mutual support. During the program, parents complete a *support network handout* where parents fill in five "helping hands" with the people they think will support them (e.g., friends, family, teachers, counselors, health care provideers, childcare providers, neighbors).

Principle 11: Combining Individual Home Coaching with Group Program

Generalization of the strategies parents learn is also an important consideration. To that end, some individual coached practice between the parent and child is recommended for all parents. The amount of individual coaching parents need will vary depending on their confidence in using the parenting techniques and level of the child's behavioral difficulties. Even if parents seem to demonstrate understanding of the parenting strategies in group discussions and role plays, seeing them interacting with their own children is the best way to find out how well they are integrating the skills. These coaching sessions can be delivered in a clinic setting but ideally will be provided in home- and communitybased or naturalistic settings such as the grocery store, playground, or preschool. It is ideal for coaching to occur four times, after group sessions on language coaching, social and emotion coaching, pretend play and self-regulation, and handling misbehavior. The format for these coaching sessions includes (1) review of parent's goals, (2) discussion of one to two video vignettes relevant for goals, (3) coached practice between parent and child, (4) debriefing practice, and (5) setting new goals. Ideally the person doing the home coaching is the group leader; if this is not feasible, it is important that the home coach has connected with the group leader to discuss what has been covered in the group at that time and builds on recommended home activity assignments.

Principle 12: Provide Follow-up Sessions and Promote Parent-Teacher Partnerships

Because social-communication deficits are core features of ASD, it is recommended that after parents complete IY-ASD, focused on one-on-one interactions, they are offered another program called Coaching Children with Autism: Teachers and Parents as Partners. This four- to six-session program that preferably is offered to both parents and teachers together focuses on classrooms where teachers are coaching two to three children with ASD to facilitate peer interactions and social communication with sequenced picture cue cards. Doing this curriculum with teachers builds the parent-teacher partnership and makes it easier for the parent to occasionally participate in the classroom if they have the time. It means that parents and teachers can work on behavior plans together and promotes cross-setting consistency in language and methods used. For example, if the "calm down thermometer" works well at home, the teacher can also use it in the classroom.

Supplemental content from the *IY-BASIC* program *Managing Misbehavior* may also be necessary for some older children with significantly challenging behaviors. Parents may require further practice understanding the function of behavior, antecedent and environmental accommodations, and consequence modification. *IY-BASIC* content regarding the use of time-out can be adapted for this population by helping the parent understand the value of allowing the child space and time to calm down while emphasizing the potential for time-out strategies to inadvertently reinforce behaviors of a child who prefers to be alone and escape social interactions.

Principle 13: Help Advocate for Families

Due to the limited knowledge regarding the causes of ASD and lack of a cure, parents find themselves researching for information and seeking a variety of interventions. Children with ASD and their families frequently participate in multiple approaches with several different providers. For example, parents often seek behavioral, neurodevelopmental (i.e., speech and occupational therapies), school-based, and biomedical interventions. Effective group leaders will collaborate with other providers and coach parents in ways to advocate for their children's needs. Several options can be incorporated into the program in order to promote collaboration and advocacy. For example, leaders can communicate directly with therapists and educators to share the approaches parents are learning, consult about the child's behavior, or arrange team meetings. Additionally, supplemental content can be added from the IY Advanced Parent Program that focuses on advocacy, family and teacher problem-solving, and working as a team to support the child.

Future Directions and Summary

Over half of young children with ASD exhibit behavioral problems including oppositional behaviors and aggression (Bearss et al., 2016). However, evidence-based parenting training interventions known to reduce disruptive behavior problems have rarely been evaluated with parents raising young children with ASD. One example of an evidence-based parent training programs is The Incredible Years (IY-BASIC) which has been evaluated in over 50 randomized control group studies in an effort to prevent and reduce conduct problems (Menting et al., 2013). In a pilot study in which IY-BASIC was evaluated with parents of children with ASD, results indicated a positive response to the program, along with several recommendations, such as inclusion of children with ASD on the video vignettes (Dababnah & Parish, 2016c). A revised Incredible Years program, IY-ASD program, was developed by Webster-Stratton for parents of children 2-5 years with ASD. IY-ASD offers promise for improving parent confidence and support; reducing stress and depression; promoting children's social, emotional, and language development; and reducing misbehavior. Preliminary evaluations of IY-ASD have found positive reductions in parenting stress and child behavior problems, as well as high participant acceptability (Hutchings et al., 2016).

Future research is needed using randomized controlled group trials to examine the effectiveness of the IY-ASD Parent Program for parents and children. The outcomes of these studies should include parents' feelings of competence and level of support, parent stress and depression, as well as child behavior improvements. A recent study suggested that an individual home-based parent intervention was more effective than a group-based parent intervention program in terms of child outcomes of social communication and receptive language (Wetherby et al., 2014). We argue for the added benefits that a groupbased approach can provide in terms of building family support systems and reducing parent stress and depression, which may in the long run lead to more sustainability of outcomes. However, by offering parents individual coaching alongside a group approach, we believe it is possible to enhance the outcomes for both children and their families and still reduce the cost of intense clinician-implemented interventions. This is an important direction for future research.

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