OVERVIEW OF THE CLINICAL PROBLEM

Rates of early-onset conduct problems in preschool children are alarmingly high: 6–15% (Egger & Angold, 2006; Sawyer, 2000) and as high as 35% for low-income families (Webster-Stratton & Hammond, 1998). Developmental theorists have suggested that, compared to typical children, “early starter” delinquents who first exhibit conduct problems or oppositional defiant disorder (ODD) in the preschool years, have a two- to threefold risk of becoming tomorrow’s serious violent and chronic juvenile offenders (Loeber & Farrington, 2000; Loeber et al., 1993; Patterson, Capaldi, & Bank, 1991; Snyder, 2001; Tremblay et al., 2000). Indeed, the primary developmental pathway for serious conduct disorders (CDs) in adolescence and adulthood appears to be established during the preschool period.

Risk factors that contribute to child conduct problems include ineffective parenting (Farrington, Loeber, & Ttofi, 2012; Jaffee, Caspi, Moffitt, & Taylor, 2004), family mental health and criminal history (Knutson, DeGarmo, Koepppl, & Reid, 2005), child biological and developmental risk factors (e.g., attention deficit disorders, learning disabilities, and language delays; Beauchaine, Hinshaw, & Pang, 2010), school risk factors (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999; Webster-Stratton & Reid, 2010), and peer and community risk factors (e.g., poverty and gangs) (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000;
The Incredible Years Program for Conduct Problems

Hawkins et al., 2008). Treatment–outcome studies suggest that interventions for CD are of limited effect when offered in adolescence, after delinquent and aggressive behaviors are entrenched, and secondary risk factors such as academic failure, school absence, and the formation of deviant peer groups have developed (Dishion & Pihler, 2007; Offord & Bennett, 1994).

The current policy thrust is toward earlier intervention, because it addresses early risk factors, before secondary risk factors have developed. For these reasons, The Incredible Years® (IY) treatment programs were designed to prevent and treat behavior problems when they first begin and to intervene in multiple settings with parents, teachers, and children. This approach to early intervention can counteract risk factors and strengthen protective factors, thereby helping to prevent a developmental trajectory toward increasingly aggressive and violent behaviors. This chapter reviews the IY programs and their associated research.

CONCEPTUAL MODEL
GUIDING THE TREATMENT PROGRAMS

The IY interventions are targeted to effect change in key parent, teacher, and child risk and protective factors implicated in the development and prevention of children’s conduct problems. See the logic model at http://incredibleyears.com/programs and Figure 8.1 for an overview of the programs and hypothesized mechanism of change.

The parent and teacher programs begin with a focus on enhancing positive relationships and attachment between parents, teachers, and children by teaching child-directed interactive play; social, emotional, academic, and persistence coaching; and interactive reading methods, praise, and incentive programs. Teachers and parents also discuss age-appropriate proactive parenting and teaching strategies that include introducing rules and predictable routines, giving clear commands, and using a specific set of positive discipline techniques (e.g., monitoring, ignoring, effective limit setting, redirection and distractions, natural and logical consequences, and time-out to calm down). Parents and teachers of preschool and school-age children are taught how to teach children problem-solving, friendship, and emotion regulation skills. These programs are set within a developmental context in which parents and teachers discuss how to apply the program material to meet each child’s unique temperament and developmental level.

The child training program provides explicit teaching to support positive social, emotion regulation, and problem-solving behaviors. This training focus on areas that children with conduct problems and attention-deficit/hyperactivity disorder (ADHD) struggle with, providing added structure, monitoring, coaching, and repeated learning trials that help children learn to inhibit undesirable behaviors and to manage emotion. The group format of the child program provides an opportunity to practice new skills with peers, focusing on each child’s particular social learning needs, such as problem-solving, perspective-taking, and play skills, as well as emotional literacy and special academic needs.
FIGURE 8.1. The Incredible Years intervention programs.
CHARACTERISTICS OF THE TREATMENT PROGRAMS

The IY BASIC Parenting Programs

Goals of the BASIC Parent Programs

Goals of the parent programs are to promote parent competencies and strengthen families by

- Increasing positive parenting, self-confidence, and parent–child attachment.
- Teaching parents to coach children’s language development, academic readiness, persistence and sustained attention, and social and emotional development.
- Decreasing harsh discipline and increasing positive behavior management strategies.
- Improving parents’ problem solving, depression and anger management, and positive communication.
- Increasing family support networks and school involvement/bonding.
- Helping parents and teachers work collaboratively.
- Increasing parents’ involvement in academic-related activities at home.

Content of the BASIC IY Parent Training Treatment Program

In 1980, the first IY program, an interactive, video-based parent intervention (BASIC) was developed and researched for parents of children ages 2–8 years (Webster-Stratton, 1981). This program has been revised and updated, and now includes four separate BASIC programs: Baby Program (4 weeks to 9 months), Toddler Program (1–3 years), Preschool Program (3–5 years), and School-Age Program (6–12 years). Trained and accredited IY group leaders/clinicians meet weekly for 2 hours with groups of 10–12 parents and use selected DVD vignettes to trigger discussions, problem solving, and practices. Each program has an extensive leader manual and text, parent handouts, and a parent textbook. The number of weekly sessions ranges from 10 to 24 weeks. The protocol for high-risk populations or those families whose children are diagnosed with ODD or ADHD is longer than protocols for the prevention population (see website for protocols). Group leaders should complete at least the minimum number of recommended sessions for the population addressed and pace the learning according to family goals, needs, and progress. The specific objectives for each of these programs can be found at http://incredibleyears.com/about/incredible-years-series/objectives.

THE IY BABY AND TODDLER PROGRAMS

These programs focus on supporting babies and toddlers to successfully accomplish three developmental milestones: secure attachment with their primary caregivers, language and social expression, and beginning development of a sense of self. Program topics for the baby program include baby-directed play; speaking “parentese”; providing physical, tactile, and visual stimulation; providing nurturing parenting; providing a language-rich environment; baby-proofing; and building a support network.
Program topics for the toddler program include toddler-directed play, descriptive commenting, social and emotional coaching, language-rich specific praise, understanding toddlers’ drive for exploration and need for predictable routines, clear limit setting, toddler-proofing to ensure safety, and separation and reunion strategies.

THE IY BASIC PRESCHOOL PROGRAM

This program focuses on the developmental milestones of encouraging school readiness skills (prewriting, prereading, discovery learning), emotional regulation, and beginning friendships skills. The program builds on the topics in the toddler program and adds academic, persistence, and self-regulation coaching; proactive discipline; and teaching children beginning problem-solving skills.

THE SCHOOL AGE PROGRAM

This program focuses on encouraging children’s independence, motivation for academic learning, and development of family responsibility and empathy awareness. Program topics continue to build on core relationship skills with special time with parents, incentive systems for difficult behaviors, clear and respectful limit setting, encouragement of family chores, predictable homework routines, adequate monitoring, logical consequences, and working successfully with teachers. The school-age program has protocols for 6- to 8- and 9- to 12-year-old children. The older age protocol includes content on monitoring afterschool activities and discussions regarding family rules about TV and computer use, as well as drugs and alcohol.

THE ADVANCE PARENT TRAINING TREATMENT PROGRAM

In addition to parenting behavior per se, other aspects of parents’ behavior and personal lives constitute risk factors for child conduct problems (Farrington et al., 2012). The ADVANCE treatment program, a 10- to 12-session program offered after the completion of the BASIC program, teaches adult conflict and depression management, problem solving, and emotion regulation. This program is designed to help mediate the negative influences of these personal and interpersonal factors on parenting skills and promote increased maintenance and generalizability of treatment effects.

Adjunct IY Parenting Programs

In addition to the previously described parenting programs, there are several adjunct parenting programs designed to target specific developmental issues or populations.

The School Readiness Program

This four-session curriculum for preschoolers is a prevention program to help parents promote children’s school readiness by supporting their children’s self-confidence and facilitating their language and reading skills.
The Attentive Parenting Program

The Attentive Parenting® Program, a universal prevention program for children ages 2–6, is designed to teach social, emotional, and persistence coaching, and reading skills; and to promote children's self-regulation and problem-solving skills. There is a 4- to 6-week protocol for parents of toddlers (2–4 years) and a 6- to 8-week protocol for parents of 4- to 6-year-old children.

The Parenting Program for Children with Autism Spectrum Disorder

This program for children ages 2 –5 provides vignette examples of children with language delays and/or who are on the autism spectrum. This 12- to 14-week program can be used in its entirety with groups of parents who have young children with these diagnoses, or selected vignettes can be used to supplement the BASIC preschool program for parents who have children with an autism spectrum disorder (ASD). Program topics parallel those in the BASIC parenting program, with attention to ways that parenting strategies need to be modified for children with developmental delays or ASD. Modifications include using gestures, imitation, songs, and visual picture cards for children with limited language; incorporating social sensory routines to get in children’s attention spotlight; engaging in pretend and puppet play to enhance joint play; teaching self-regulation skills; and using concepts of antecedent accommodations and environmental modification to promote appropriate behavior and replacement behaviors (Webster-Stratton, Dababnah, & Olson, 2017).

The IY Teacher Classroom Management Intervention

Once children with behavior problems enter school, negative academic and social experiences escalate the development of conduct problems. Aggressive, disruptive children quickly become socially excluded, which reduces opportunities to interact socially and to learn appropriate friendship skills. Peer rejection eventually leads to association with deviant peers, which increases their risk for drug abuse and antisocial behavior (Dishion & Pichler, 2007).

Furthermore, teacher behaviors and school characteristics, such as low emphasis on teaching social and emotional competence, low rates of praise, and high student–teacher ratio are associated with classroom aggression, delinquency, and poor academic performance. Aggressive children frequently develop poor relationships with teachers and are often expelled from classrooms. Lack of teacher support and exclusion from the classroom exacerbates these children’s social problems and academic difficulties, contributing to the likelihood of school dropout. Clearly, integrating interventions across home and school settings to target school and family risk factors fosters greater between-environment consistency and offers the best chance for long-term reduction of antisocial behavior.

Content of the Teacher Classroom Management Training Intervention

The teacher training program is a 6-day (or 42-hour) group format program for teachers, school counselors, and psychologists working with children ages 3–8
years. A complete description of the program content is described in the book that teachers use for the course, titled *Incredible Teachers* (Webster-Stratton, 2012b).

**Incredible Beginnings: Teacher and Child Care Provider Program**

This 6-day, group-based program is for day care and preschool teachers of children ages 1–5 years. Topics include coping with toddler’s separation anxiety and promoting attachment with caregivers; collaborating with parents and promoting their involvement; promoting language development with gestures, imitation, modeling, songs and narrated play; using puppets, visual prompts, books, and child-directed coaching methods to promote social and emotional development; and proactive behavior management approaches.

**Helping Preschool Children with Autism: Teachers and Parents as Partners Program**

This program is designed to be used as an add-on program to the IY Parent Program for Children with ASD and to the IY Teacher Classroom Management Program. The program focuses on how to promote language development and communication with peers, and helps teachers and parents to provide social and emotional coaching and teach children self-regulation skills.

**The IY Child Training Intervention (Dinosaur School)**

Aspects of the child’s internal organization at the physiological, neurological, and/or neuropsychological level are linked to the development of conduct disorders, particularly for children with a chronic history of early behavioral problems (Beauchaine, Neuhaus, Brenner, & Gatzke-Kopp, 2008). Children with conduct problems are more likely to have temperamental characteristics such as inattentiveness, impulsivity, and ADHD. Deficits in social-cognitive skills and negative attributions have also been linked to early-onset conduct problems and contribute to poor emotional regulation and aggressive peer interactions (Dodge & Feldman, 1990). Children with conduct problems have significant delays in their peer-play skills: difficulty with reciprocal play, cooperative skills, taking turns, waiting, and giving suggestions. Finally, reading, learning, language delays, and autism are also associated with conduct problems, particularly for “early life course persisters.” The relationship between academic performance and ODD/CD is bidirectional, with academic difficulties leading to frustration and behavior problems, and behavior problems limiting a child’s ability to be engaged in learning. This combination of academic delays and conduct problems appears to contribute to the development of more severe CD and school failure.

**Goals of the Child Training Programs**

The child training programs promote children’s competencies and reduce aggressive and noncompliant behaviors by doing the following:

- Strengthening socially appropriate play skills.
The Incredible Years Program for Conduct Problems

- Increasing emotional awareness and language.
- Promoting children's ability to persist with and attend to difficult tasks.
- Boosting academic success, reading, and school readiness.
- Reducing defiance, aggression, noncompliance, peer rejection, and bullying, and promoting compliance with teachers and peers.
- Decreasing negative attributions and conflict management approaches.
- Increasing self-esteem and self-confidence.

Content of the Child Training Treatment

The child treatment program targets 4- to 8-year-old children with conduct problems who meet weekly for 2 hours in groups of six children. Organized to dovetail with the content of the parent training program, the 18- to 22-week program consists of seven main components: (1) Introduction and Rules; (2) Empathy and Emotion; (3) Problem Solving; (4) Anger Control; (5) Friendship Skills; (6) Communication Skills; and (7) School Skills.

Group Process and Methods Used in Parent, Teacher, and Child Training Programs

The underlying theoretical background for all the programs includes cognitive social learning theory (Patterson, Reid, & Dishion, 1992); Bandura's modeling and self-efficacy theories (Bandura, 1986); Piaget's developmental cognitive stages; cognitive strategies for challenging angry, depressive self-talk (Beck, 1979; Piaget & Inhelder, 1962); and attachment theories (Bowlby, 1980, Ainsworth, 1974). All IY treatment approaches rely on performance training methods, including video modeling, role play, practice activities, and live therapist and peer feedback. In accordance with modeling and self-efficacy theories of learning, participants in the programs develop skills by watching (and modeling) video vignettes of key skills. Video examples provide a more accessible and flexible method of training than didactic verbal instruction or sole reliance on role play, because they portray a wide variety of models and situations. The developer hypothesized that this flexible modeling approach would result in better generalization of the training content and, therefore, more sustainable long-term maintenance. Furthermore, it would be a better method of learning for less verbally oriented learners.

The video vignettes show parents, teachers, and children of differing ages, cultures, socioeconomic backgrounds, and temperaments, so that participants perceive at least some of the models as similar to themselves and accept the vignettes as relevant. Many of the programs have been translated into multiple languages. Vignettes show models (unrehearsed) in natural situations “doing it effectively” and “doing it less effectively” in order to demystify the notion there is “perfect parenting or teaching,” and to illustrate how to learn from mistakes. This approach also emphasizes a coping, interactive, and experiential model of learning (Webster-Stratton, 2012a; Webster-Stratton & Herbert, 1994); that is, participants view a video vignette of a situation, then discuss and practice how the individual handled the interaction effectively or might do so more effectively. This approach enhances participants’ confidence in their own ideas and develops their ability to analyze interpersonal situations and select an appropriate response. In this respect, IY
training differs from some training programs in which the therapist provides the analysis and recommends a particular strategy.

The video vignettes demonstrate behavioral principles and serve as the stimulus for discussions, self-reflection, problem solving, practice, and collaborative learning. The therapist’s role is to support group members by teaching, leading, reframing, predicting, and role playing, always within a collaborative context. The collaborative context is designed to ensure that the intervention is sensitive to individual cultural differences and personal values. The program is “tailored” to each teacher, parent, or child’s individual needs and personal goals, as well as to each child’s temperament and behavior problems.

The group format is more cost-effective than individual intervention and also addresses an important risk factor for children with conduct problems: the child and family’s isolation and stigmatization. The groups provide support and a positive peer group for parents, teachers, and children (for details of the parent, teacher, and child therapeutic processes, see Webster-Stratton, 2012a, 2012b).

In the child program, methods are developmentally tailored to the ages of the children. After viewing the vignettes, children discuss feelings, generate ideas for more effective responses, and role-play alternative scenarios. Therapists use life-size puppets to model appropriate behavior and thinking processes. Because young children are more vulnerable to distraction, are less able to organize their thoughts, and have poorer memories, material is taught and reviewed through games, songs, art projects, behavioral practice, visual cue cards, story telling by the puppets, video vignettes, coached play times, home activities, and letters for teachers and parents.

**Home-Based Delivery**

While participation in the group-based IY programs is highly recommended because of the support and learning provided by other parents, there is also a home-based coaching model for each parenting program. Home-based sessions can be offered to parents who cannot attend groups, or as makeup sessions, and are highly recommended as a coached parent–child practice supplement to the group program for high-risk families, such as those referred by child welfare services and for families with children with conduct problems, ADHD, and on the autism spectrum.

**EVIDENCE ON THE EFFECTS OF TREATMENT**

**Effects of Parent Training Programs with Treatment-Indicated Populations**

The efficacy of the IY BASIC parent treatment program for children (ages 2–8 years) diagnosed with ODD/CD and ADHD has been demonstrated in eight published randomized controlled group trials by the program developer. See references and a detailed review of studies at [http://incredibleyears.com/books/iy-training-series-book](http://incredibleyears.com/books/iy-training-series-book). The BASIC program has consistently improved parental attitudes and parent–child interactions, and has reduced harsh discipline and child conduct problems compared to wait-list control groups. These results are consistent for toddler, preschool, and school-age versions of the programs (Gross, Fogg, Webster-Stratton, Garvey, Julion, & Grady, 2003). One study (Webster-Stratton, 1994) indicated the additive benefits of combining the BASIC program with the ADVANCE program.
on children’s prosocial solution generation and parents’ marital interactions. Consequently, a 20- to 24-week program that combined BASIC plus ADVANCE became the core treatment for parents of children diagnosed with ODD and/or ADHD and was used for the majority of the treatment studies. One recent pilot study evaluating the BASIC program with parents of children with ASD indicated promising results, including a reduction in parent stress (Dababnah & Parish, 2014).

Several studies have also shown that IY treatment effects are durable 1–3 years posttreatment (Webster-Stratton, 1990; Webster-Stratton, Hollinsworth, & Kolpacoff, 1989; Webster-Stratton, Reid, & Beauchaine, 2013). There are two 8- to 12-year follow-up studies of families treated with the IY parent program because of their children’s conduct problems (Scott, Briskman, & O’Connor, 2014; Webster-Stratton, Rinaldi, & Reid, 2010). The Webster-Stratton (1990) study indicated that 75% of the teenagers were typically adjusted, with minimal behavioral and emotional problems. The Scott et al. (2014) study indicated that in comparison to mothers in the control condition, who received individualized supportive therapy, the mothers in the IY treatment condition expressed greater emotional warmth and supervised their adolescents more closely, and their children’s reading ability was substantially improved. The BASIC programs results have been replicated with treatment populations by independent investigators in mental health clinics with families of children diagnosed with conduct problems (Drugli & Larsson, 2006; Drugli, Larsson, Fossum, & Morch, 2010; Gardner, Burton, & Klimes, 2006; Scott, Spender, Doolan, Jacobs, & Aspland, 2001; Scott et al., 2010; Taylor, Schmidt, Pepler, & Hodgins, 1998) and in doctor’s offices with toddlers with ADHD symptoms (Lavigne, LeBailly, Gouze, Cicchetti, Pochyly, et al., 2008; Perrin, Sheldrick, McMenamy, Henson, & Carter, 2014).

Two studies have examined the additive effects of combining the IY child training intervention (CT) and IY teacher training with the parent program (PT) for parents with children with ODD (Webster-Stratton & Hammond, 1997; Webster-Stratton, Reid, & Hammond, 2004). Both studies provided data on the advantages of adding training for children and teachers. (See description of these study results below, in the section on effects of child and teacher training programs.)

**Effects of Parent Training Programs with Selective and Universal Populations**

The parent program has also been shown in multiple randomized controlled trials (RCTs) by the developer (Reid, Webster-Stratton, & Beauchaine, 2001; Webster-Stratton, 1998; Webster-Stratton, Reid, & Hammond, 2001) and independent investigators (see review by Pidano & Allen, 2015, and Webster-Stratton & Reid, 2010) to be effective for diverse socioeconomically disadvantaged populations. These studies showed positive effects on parenting and child behaviors similar to the treatment studies discussed earlier, and were consistent across parents from culturally diverse backgrounds. The replications by independent investigators were “effectiveness” trials in community settings and not a university research clinic, and the IY therapists were existing staff (nurses, social workers, and psychologists) at the centers or doctor’s offices (e.g., Perrin et al., 2014; Posthumus, Raaijmakers, Maassen, Engeland, & Matthys, 2012; Raaijmakers et al., 2008). The program has also been found to be effective with diverse populations including those representing Latino, Asian,
African American, and Caucasian background in the United States (Reid et al., 2001), and other countries, such as the United Kingdom, Ireland, Norway, Sweden, Holland, New Zealand, Wales, and Russia (Gardner et al., 2006; Hutchings et al., 2007; Larsson et al., 2009; Raaijmakers et al., 2008; Scott et al., 2001, 2010).

In a meta-analytic review of 50 control group studies evaluating the effectiveness of the IY parent programs, Menting, Orobio de Castro, and Matthys (2013) found an average effect size for disruptive behaviors of $d = 0.39$ for 40 studies conducted in North America and an average effect size of $d = 0.31$ for 10 studies conducted in Europe. These findings illustrate the transportability of the IY parenting programs to other cultures and countries. See Table 8.1 for a summary of the developer's studies with the IY.

### TABLE 8.1. Summary of Treatment Results for Studies Evaluating The Incredible Years Programs

<table>
<thead>
<tr>
<th>Program evaluated</th>
<th>Number of studies$^a$</th>
<th>Investigator: Program developer or independent replication</th>
<th>Population: Prevention or treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent</td>
<td>6</td>
<td>Developer</td>
<td>Treatment</td>
</tr>
<tr>
<td>Parent</td>
<td>4</td>
<td>Developer</td>
<td>Prevention</td>
</tr>
<tr>
<td>Child</td>
<td>2</td>
<td>Developer</td>
<td>Treatment</td>
</tr>
<tr>
<td>Child</td>
<td>1</td>
<td>Developer</td>
<td>Prevention</td>
</tr>
<tr>
<td>Teacher</td>
<td>1</td>
<td>Developer</td>
<td>Treatment</td>
</tr>
<tr>
<td>Teacher</td>
<td>2</td>
<td>Developer</td>
<td>Prevention</td>
</tr>
<tr>
<td>Parent</td>
<td>5</td>
<td>Replication</td>
<td>Treatment</td>
</tr>
<tr>
<td>Parent</td>
<td>5</td>
<td>Replication</td>
<td>Prevention</td>
</tr>
<tr>
<td>Child</td>
<td>1</td>
<td>Replication</td>
<td>Treatment</td>
</tr>
<tr>
<td>Child</td>
<td>1</td>
<td>Replication</td>
<td>Prevention</td>
</tr>
<tr>
<td>Teacher</td>
<td>2</td>
<td>Replication</td>
<td>Prevention</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Effect size$^b$ (Cohen’s $d$)</th>
<th>Most effective program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive parenting increased</td>
<td>$d = 0.46–0.51$</td>
<td>Parent</td>
</tr>
<tr>
<td>Harsh parenting decreased</td>
<td>$d = 0.74–0.81$</td>
<td>Parent</td>
</tr>
<tr>
<td>Child home behavior problems decreased</td>
<td>$d = 0.41–0.67$</td>
<td>Parent</td>
</tr>
<tr>
<td>Child social competence</td>
<td>$d = 0.69–0.79$</td>
<td>Child</td>
</tr>
<tr>
<td>School readiness and engagement</td>
<td>$d = 0.82–2.87$</td>
<td>Child and teacher</td>
</tr>
<tr>
<td>Child school behavior problems</td>
<td>$d = 0.71–1.23$</td>
<td>Child and teacher</td>
</tr>
<tr>
<td>Parent–school bonding</td>
<td>$d = 0.57$</td>
<td>Teacher</td>
</tr>
<tr>
<td>Teacher positive management</td>
<td>$d = 1.24$</td>
<td>Teacher</td>
</tr>
<tr>
<td>Teacher critical teaching</td>
<td>$d = 0.32–1.37$</td>
<td>Teacher</td>
</tr>
</tbody>
</table>

$^a$All studies used randomized controlled group design and are cited in the reference list. In treatments studies, subjects were randomly assigned at the child level; in prevention studies, randomization was assigned at the classroom or school level.

$^b$Effect sizes include both treatment and prevention studies conducted by the program developer and are between-group effects. The range of effect sizes represents the range for a particular outcome across all studies that included that outcome measure. The information to calculate effect sizes for independent replications was not available. The more recently developed adjunct parent programs and the teacher Incredible Beginnings program have not been researched by the developer and are currently being studied in Norway and Wales.
To date, one RCT has been conducted by an independent investigator in Norway using a briefer version of the BASIC Preschool Program with a universal, non-high-risk population that has shown promising results (Reedtz, 2010). Another Norwegian study using the Attentive Parenting Program as a universal delivery system is currently being evaluated. Two pilot studies with IY baby and autism programs indicate promising results (Evans, Davies, Williams, & Hutchings, 2015; Hutchings, Pearson-Blunt, Pasteur, Healey, & Williams, 2016).

Who Benefits from Parent Training Treatment?

We have assessed both statistical significance and clinical significance of treatment effects. Clinical significance was defined as being within the normal or the nonclinical range of functioning, or showing a 30% improvement if there were no established normative data. In our 3-year follow-up of 83 families treated with the BASIC program, we found that 25–46% of parents and 26% of teachers still reported child behavior problems (Webster-Stratton, 1990). We also found that the families whose children had continuing externalizing problems (according to teacher and parent reports) were more likely to be characterized by maritally distressed or single-parent status; increased maternal depression; lower social class; high levels of negative life stressors; and family histories of alcoholism, drug abuse, and spouse abuse (Webster-Stratton, 1990; Webster-Stratton & Hammond, 1990).

Hartman (Hartman, Stage, & Webster-Stratton, 2003) examined whether child ADHD symptoms (i.e., inattention, impulsivity, and hyperactivity) predicted poorer treatment results from the parent training intervention (BASIC). Contrary to Hartman’s hypothesis, analyses suggested that the children with ODD/CD who had higher levels of attention problems showed greater reductions in conduct problems than children with no attention problems. Similar findings for children with ADHD were reported in the U.K. study (Scott et al., 2001). A recent study with children whose primary diagnoses was ADHD indicated that the combined parent plus child program was effective in reducing children’s externalizing, hyperactivity, inattentive and oppositional behaviors, and improving emotional regulation and social competence (Webster-Stratton, Reid, & Beauchaine, 2011; Webster-Stratton et al., 2013).

Rinaldi (2001) examined predictors of long-term outcome and found that mothers’ posttreatment level of critical statements and fathers’ posttreatment use of praise predicted teen outcome 8–12 years after treatment. In addition, the level of coercion between the children and mothers immediately posttreatment was a predictor of later teen adjustment.

Effects of Child and Teacher Training Programs

Treatment Studies with Child and Teacher Programs as Adjuncts to Parent Programs

To date, the developer has conducted three randomized studies evaluating the effectiveness of the child program for reducing conduct problems and promoting social competence in children diagnosed with ODD/CD and ADHD. In the first study (Webster-Stratton & Hammond, 1997), children with ODD and their parents
were randomly assigned to parent training treatment (PT), child training treatment (CT), child and parent treatment (CT+PT), or a wait-list control group. All three treatment conditions showed improvements in parent and child behaviors in comparison to controls. Comparisons of the three treatment conditions indicated that children who received CT showed improvements in problem solving and conflict management skills compared to those in the PT only condition. On measures of parent and child behavior at home, PT and CT+PT parents and children had more positive interactions in comparison to CT parents and children. All the changes noted immediately posttreatment were maintained at 1-year follow-up, and child conduct problems at home had decreased over time. Analyses of the clinical significance of the results suggested that the combined CT+PT condition produced the most sustained improvements in child behavior at 1-year follow-up. Children from all three treatment conditions showed increases in behavior problems at school 1 year later, as measured by teacher reports.

In a second study, Webster-Stratton et al. (2004) tested the effects of different combinations of parent, child, and teacher training. Families with a child diagnosed with ODD were randomly assigned to one of six groups: (1) parent training only (PT); (2) child training only (CT); (3) parent training and teacher training (PT+TT); (4) parent training, teacher training, and child training (PT+TT+CT); (5) child training and teacher training (CT+TT); and (6) wait-list control group. Results from this study (Webster-Stratton et al., 2004) replicated our previous findings on the effectiveness of the parent and child training programs and indicate that teacher training improves teachers’ classroom management skills and decreases children’s classroom aggressive behavior. In addition, treatment combinations that added either child training or teacher training to the parent training were most effective. Most treatment effects were maintained at 1-year follow-up.

A third RCT evaluated the effects of the IY parent program in combination with the child training program for children diagnosed with ADHD. Independent observations at home revealed treatment effects for reducing children’s deviant behaviors with mothers. Mothers, fathers, and teachers reported improvements in children’s externalizing behaviors, and peer observations in the classroom indicated improvements in treated children’s social competence (Webster-Stratton et al., 2011).

Selective Prevention Studies: Randomized control group studies by the developer (Webster-Stratton et al., 2001) and an independent evaluator (Raver et al., 2008) evaluated the teacher classroom management (TCM) training curriculum in prevention settings with Head Start teachers. In the Webster-Stratton et al. (2001) study, children in the treatment group showed fewer conduct problems at school than did controls, and trained teachers showed better classroom management and more bonding with parents. In the Raver et al. (2008) study, Head Start classrooms in the treatment condition had higher levels of positive classroom climate, teacher sensitivity, and behavior management than did classrooms in the control condition.

A recent study with primary grade teachers has evaluated the benefits of the TCM program for targeting teachers’ awareness of the importance of enhancing parents’ involvement in their children’s education and for improving student academic competence (Reinke, Stormont, Webster-Stratton, Newcomer, & Herman, 2012; Reinke et al., 2014). Preliminary results of a randomized trial of TCM (105
teachers, 1,818 students) suggested that improving teacher–parent bonding and parent educational involvement holds promise for improving child academic and behavior outcomes at school (Reinke, Herman, & Dong, 2016).

Last, an RCT evaluated the teacher training plus classroom Dinosaur curriculum in Head Start and elementary schools serving economically disadvantaged children (N = 153 teachers and 1,768 students). Results showed improvements in intervention students’ conduct problems, self-regulation, and social competence compared with control students (Webster-Stratton, Reid, & Stoolmiller, 2008).

Who Benefits from Dinosaur Child Training?

Families of 99 children, ages 4–8 years, with ODD/CD were randomly assigned to either the child training treatment group or a control group and assessed on multiple risk factors (child hyperactivity, parenting style, and family stress). Hyperactivity or family stress risk factors did not have an impact on children's ability to benefit from the treatment program. Negative parenting did have a negative impact on children's treatment outcomes. Fewer children who had parents with one of the negative parenting risk factors (high levels of criticism or physical spanking) showed improvements compared to children who did not have a negative parenting risk factor. This finding suggests that for children whose parents exhibit harsh and coercive parenting styles, a parenting intervention should be offered in addition to a child intervention (Webster-Stratton et al., 2001). Our studies also suggest that child training enhances the effectiveness of parent training treatment for children with pervasive conduct problems (home and school settings).

Who Benefits From Treatment and How?

Beauchaine, Webster-Stratton, and Reid (2005) examined mediators, moderators, and predictors of treatment effects by combining data from six RCTs of the IY program (including 514 children between ages 3 and 9). Families in these trials had received parent training, child training, teacher training, or a combination of treatments. Marital adjustment, maternal depression, paternal substance abuse, and child comorbid anxiety and attention problems were treatment moderators. In most cases, intervention combinations that included parent training were more effective than interventions without parent training. For example, children of mothers who were maritally distressed fared better if their treatment included parent training. Indeed, parent training exerted the most consistent effects across different moderating variables, and there were no instances in which interventions without parent training were more effective than interventions with parent training. However, the addition of teacher training seemed to be important for impulsive children. Finally, despite these moderating effects, more treatment components (parent, child, plus teacher training) were associated with steeper reductions in mother-reported externalizing slopes. This suggests that, all things being equal, more treatment is better than less. Harsh parenting practices both mediated and predicted treatment success; in other words, the best treatment responses were observed among children of parents who scored relatively high on verbal criticism and harsh parenting at baseline, but nevertheless improved during treatment.
In a prevention study with socioeconomically disadvantaged children, with and without conduct problems (Reid, Webster-Stratton, & Baydar, 2004), we found that child change was related to maternal engagement in the parenting program and to whether mothers reduced their critical parenting. In this study, maternal program engagement was highest for highly critical mothers and for mothers of children who had the highest levels of conduct problems. In a second study analyzing these same prevention data, Baydar, Reid, and Webster-Stratton (2003) found that while mothers with mental health risk factors (i.e., depression, anger, history of abuse as a child, and substance abuse) exhibited poorer parenting at baseline than mothers without these risk factors, they were engaged in and benefited from the parenting training program at levels that were comparable to those of mothers without these risk factors. Research also showed that dosage of intervention was related to treatment outcome, with mothers who attended more sessions showing more change in parenting than those who attended fewer sessions. A similar independent finding regarding dose effects, with greater improvement for those receiving more treatment sessions, was also found in a study treating children with ODD in a primary care setting (Lavigne, LeBailly, Gouze, Cicchetti, Jessup, et al., 2008). This argues for the importance of not abbreviating intervention.

FUTURE DIRECTIONS

In recent years, the IY parent programs have been expanded, with new vignettes to include older children (8–13 years), as well as infants and toddlers (0–3 years). Several studies have shown positive outcomes with the IY toddler program (Henningham, Hutchings, Griffith, Bywater, & Williams, 2013; Gross et al., 2003; Perrin et al., 2014) and another study evaluating the baby plus toddler program for depressed mothers is currently underway. More research is needed with regard to the home-based coaching method of IY program delivery and determining the type, timing, and dosage of specific IY programs needed for particular populations. New studies are needed to evaluate the recently developed Incredible Beginnings program to assess the impact of more comprehensive training for day care providers of very young children and the new IY teacher and parent programs for children on the autism spectrum. By providing a continuum of prevention and treatment services, it is possible to provide a road map for how to prevent the further development of CDs, delinquency, and violence, and how to optimize children’s social, emotional, and academic development.

CONCLUDING COMMENTS

While numerous studies have shown that the IY programs are transportable and effective across different contexts worldwide (Gardner, Montgomery, & Knerr, 2015), scaling up to deliver the program with fidelity on a large scale is an ongoing challenge to successful implementation. Unfortunately, research shows that fidelity and positive program outcomes are often compromised when interventions are implemented by therapists in “real-world” settings (Hoagwood, Burns, & Weisz, 2002; Schoenwald & Hoagwood, 2001).
Further research must examine economic, political, agency, and therapist variables that influence fidelity. We know what works to prevent and treat CDs and promote social and emotional competence in young children. It is now time to support large-scale, sustainable, high-quality implementation of these programs with fidelity and evaluate their outcomes.

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