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# THE INCREDIBLE YEARS: A TRAINING SERIES FOR THE PREVENTION AND TREATMENT OF CONDUCT PROBLEMS IN YOUNG CHILDREN

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#### OVERALL GOALS

The ultimate purpose of the University of Washington Parenting Clinic's program of research is to develop, evaluate, and improve cost-effective, widely applicable, and theory-based early intervention programs that are designed to prevent and treat early onset oppositional defiant disorder (ODD) and conduct disorder (CD) in children. Children with these disorders typically exhibit a broad range of antisocial behaviors (e.g., lying, cheating, stealing, fighting, oppositional behaviors, and noncompliance to parental requests) at higher-than-normal rates. Our interest in such children was stimulated by

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research showing the high prevalence rates for conduct problems—rates that are increasing at younger ages. Between 1988 and 1997, arrests of young offenders (between 7 and 12 years of age) for violent crimes increased by 45% and for drug violation by 156% (Snyder, 2001). Research indicates that aggressive children are at increased risk for being abused by their parents, as well as for school dropout, depression, drug abuse, juvenile delinquency, violence, adult crime, antisocial personality, marital disruption, and other diagnosable psychiatric disorders (Dishion, French, & Patterson, 1995; Loeber et al., 1993; Patterson, Capaldi, & Bank, 1991). Conduct problems (hereafter this term will be used to refer to young children with ODD and CD or both) are one of the most costly of mental disorders to society because such a large proportion of antisocial children remain involved with mental health agencies or criminal justice systems throughout the course of their lives.

Developmental theorists have suggested that there may be two developmental pathways related to conduct disorder: the "early-starter" versus "latestarter" models (Loeber et al., 1993; Patterson et al., 1991). The hypothesized "early-onset" pathway begins formally with the emergence of ODD in early preschool years, progresses to aggressive and nonaggressive (e.g., lying, stealing) symptoms in middle childhood, and then develops into the most serious symptoms by adolescence, including interpersonal violence, substance abuse, and property crimes (Lahey, Loeber, Quay, Frick, & Grimm, 1992). In contrast, the late-starter pathway first begins with a history of normal social and behavioral development during the preschool and early school years and progresses to symptoms of CD during adolescence. The prognosis for latestarter adolescents appears to be more favorable than for adolescents who have a history of CD beginning in their preschool years. For example, Snyder (2001) has shown that if the child was age 15 when first referred for problems, he or she has a 13% chance of becoming a chronic offender. If, on the other hand, the child was age 9 when first referred, he or she had a 36% chance of continuing as a chronic offender. Adolescents who first exhibited ODD symptoms in the preschool years followed by an early onset of CD have a two- to three-fold risk of becoming tomorrow's serious violent and chronic juvenile offenders. These children with early-onset CD also account for a disproportionate share of delinquent acts in adolescence. Thus, ODD is a sensitive predictor of CD. Indeed, the primary developmental pathway for serious conduct disorders in adolescence and adulthood appears to be established during the preschool period (Campbell, 1995; Loeber, 1991).

Theories regarding the causes of child conduct problems include ineffective parenting (e.g., harsh discipline, low parent involvement in school activities); family factors (e.g., marital conflict, depression, drug abuse, criminal behavior in parents); child biological and developmental risk factors (e.g., attention deficit disorders, learning disabilities, and language delays); school risk factors (e.g., teachers' use of poor classroom management strategies, classroom level of aggression, large class sizes, low teacher

involvement with parents); and peer and community risk factors (e.g., poverty and gangs). For reviews of risk factors, see Coie et al. (1993) and Loeber and Farrington (2000).

Because CD becomes increasingly resistant to change over time, intervention that begins in the early school years is clearly a strategic way to prevent or reduce aggressive behavior problems. Our decision to focus our interventions on the period consisting of preschool and early school years was based on several considerations. First, evidence suggests that children with ODD and CD are clearly identifiable at this age. Our prior studies have revealed that children as young as age 4 have already been expelled from two or more preschools and have experienced considerable peer and teacher rejection. Second, evidence suggests that the younger the child at the time of intervention, the more positive the child's behavioral adjustment at home and at school (Strain, Steele, Ellis, & Timm, 1982). Third, the move to school from preschool through the first years of elementary school—is a major transition and a period of great stress for many children and their parents. The child's early success or failure in adapting to school sets the stage not only for the child's future behavior at school and his or her relationships with teachers and peers but also for parents' future attitudes toward their child's schools and their own relationships with teachers and administrators. Fourth, recent projections suggest that approximately 70% of the children who need services for conduct problems—in particular, young children—do not receive them. And very few of those who do receive intervention ever receive an intervention that has been empirically validated (Brestan & Eyberg, 1998). We believe that early intervention, if placed strategically during the highrisk child's first major transition point, can counteract risk factors and reinforce protective factors, thereby helping to prevent a developmental trajectory from conduct problems to increasingly aggressive and violent behaviors. negative reputations, and spiraling academic failure.

In order to address the parenting, family, child, and school risk factors, we have developed three types of interlocking training curriculums, known as the Incredible Years Training Series, each of which is targeted at either parents or teachers or children (ages 2–8 years). This chapter reviews these training programs and their associated research (Table 20.1).

#### **INCREDIBLE YEARS PARENT INTERVENTIONS**

### Parent Training Intervention

Rationale for Parent Training

One of the major intervention strategies shown to be successful for reducing ODD and CD symptoms in children involves parent training. This

TABLE 20.1 Overview of the Incredible Years Parent, Teacher, and Child Training Programs

Interventions	Skills targeted	Person trained	Settings
Incredible Years BASIC Parent Training Programs	Parenting skills Play/involvement Praise/rewards Limit setting Discipline	Parent	targeted Home
Incredible Years ADVANCE Parent Training Programs	Interpersonal skills     Problem solving     Anger management     Communication     Depression control     Giving and getting support	Parent	Home, work, and community
Incredible Years EDUCATION Parent Training Programs (a.k.a. Supporting Your Child's Education)	Academic skills	Parent	Home— school connection
Incredible Years Teacher Training Programs	Classroom management skills; promoting parent involvement	Teacher	School
Incredible Years Child Training Programs (Dina Dinosaur Social Skills and Problem- Solving Curriculum)	Social skills     Friendship     Teamwork     Cooperation/helping     Communication	Child	Home and school
	Problem solving <ul><li>Anger management</li><li>Steps of problem solving</li></ul>		
	Classroom behavior     Quiet hand up     Compliance     Listening     Stop-look-think-check     Concentrating		

approach assumes a model in which ineffective parenting skills are the most important risk factor and intervening variable in the development and maintenance of conduct problems. We have been strongly influenced by Patterson's (1982, 1986) seminal work and theoretical formulations concerning the development of conduct disorder and problem behaviors. His social learning, interactional-based model emphasizes the importance of the

family socialization processes. Patterson developed the coercion hypothesis, which postulates that children learn to get their own way and escape (or avoid) parental criticism by escalating their negative behaviors; this, in turn, leads to increasingly aversive parent interactions. As this coercive training in a family continues over time, the rate and intensity of aggressive behaviors—on the part of parents and children—increase. Moreover, as the child observes increasingly frequent parental anger and negative discipline, the child is provided with further modeling (observational learning) of aggression (Patterson, 1982). The pioneering research of Patterson and others has found that parents of children with conduct problems exhibit fewer positive behaviors; use more violent disciplinary techniques; are more critical, more permissive, and less likely to monitor their children's behaviors; and are more likely to reinforce inappropriate behaviors while ignoring or even punishing prosocial behaviors.

In addition to social learning theory, attachment theory (Bowlby, 1980) has elucidated the importance of the affective nature of the parent-child relationship. Considerable evidence indicates that a warm, positive bond between parent and child leads to a more socially competent child, whereas high levels of negative affect and hostility on the part of parents is disruptive to children's ability to regulate their emotional responses and manage conflict appropriately. For example, research has shown that the relationship between harsh discipline and externalizing problems occurred only among children in homes in which a warm child-parent relationship was lacking (Deater-Deckard, Dodge, Bates, & Pettit, 1996). Likewise, in a recent review of research on risk and resilience, Doll and Lyon (1998) concluded that a warm relationship with at least one caregiver was a strong protective factor against the negative influences of family dysfunction. This finding was supported by results of a large national study of adolescent development that showed that youth who report positive relationships and bonding with their families and schools engage in less risky and few antisocial behaviors (Resnick et al., 1997). Accordingly, we hypothesized that if we could intervene with parents to enhance their relationships while children were still very young and their families' negative styles of interaction were still malleable, we could improve the poor long-term prognoses for these children.

### Videotape Modeling Methods

We were particularly interested in determining which *methods* of training parents were most effective—that is, cost-effective, widely applicable, and sustaining. Cost-effectiveness is vital because conduct problems are increasingly widespread, creating a need for service that far exceeds available personnel and resources. Most of the early parent training programs largely relied on verbal methods such as didactic lectures, brochures, and group dis-

cussions. Although these methods are cost-effective, they have been shown to be ineffective for inducing behavioral changes in parents, particularly in parents whose educational level or general intellectual level is deficient. On the other hand, performance training methods such as live modeling, role rehearsal, and individual video feedback had proven effective in producing behavioral changes in parents and children (O'Dell, 1985); however, implementation was time-consuming and costly, making them impractical in the face of increasing demand. Videotape modeling, on the other hand, was one method that promised to be practical and cost-effective.

In accordance with Bandura's (1989) modeling and self-efficacy theories of learning, we hypothesized that parents could develop their parenting skills by watching (and modeling) videotape examples of parents interacting with their children in ways that promoted prosocial behaviors and decreased inappropriate behaviors. We theorized that videotape would provide a more flexible method of training than didactic instruction or roleplaying exercises because of its ability to portray a wide variety of models and situations. We hypothesized that this flexible modeling approach would result in better generalization of the training content and therefore better long-term maintenance. Further, it would be a better method of learning for less verbally sophisticated parents. Finally, such a method, if proven effective, would have the advantage not only of low individual training cost when used in groups but also of possible mass dissemination. Thus, in 1979 we initiated our program of research to develop and evaluate videotape modeling parent intervention programs for families of young children with ODD and CD. We were interested both in evaluating the parent program's efficacy and in testing a theory of behavior change processes.

### Content and Process of the Incredible Years Parent Training Programs

First, we developed an interactive, videotape-based parent intervention program (BASIC) for parents of children from between the ages of 2 and 6 years. Subsequently, we added a school-age version of the BASIC parent training series (developed with a more culturally diverse population) for use with parents of children from between the ages of 6 and 10 years. Heavily guided by the modeling literature, the BASIC program aims to promote modeling effects for parents by creating positive feelings about the videotape models. For example, the videotapes show parents and children of differing ages, cultures, socioeconomic backgrounds, and temperaments so that parents will perceive at least some of the models as similar to themselves and their children and will therefore accept the tapes as relevant. Videotapes show parent models (unrehearsed) in natural situations with their children, such as eating meals, going to bed, or being potty trained and

are used to stimulate group discussion, problem solving and interactive learning. This approach emphasizes our belief in a coping and interactive model of learning (Webster-Stratton & Herbert, 1994); that is, parents view a videotape vignette and then discuss what they liked about the parents' approach or role-playing exercise and how they might have handled the interaction more effectively. This approach serves not only to enhance parents' confidence in their own ideas but also to develop their ability to analyze different situations with their children and select an appropriate parenting strategy.

The BASIC parent training program takes 26 hours, or 13 to 14 weekly 2-hour sessions. It encompasses videotape programs of modeled parenting skills (250 vignettes, each of which lasts approximately 1 to 2 minutes) shown by a therapist to groups of parents (10–14 parents per group). The program is also designed to help parents understand normal variations in children's development, emotional reactions, and temperaments. We see the therapist's role as one of supporting and empowering parents by teaching, leading, reframing, predicting, and role playing, always within a collaborative context (Webster-Stratton & Hancock, 1998; Webster-Stratton & Herbert, 1994). The collaborative context is designed to ensure that the intervention is sensitive to individual cultural differences and tailored to each family's individual needs and goals (identified in the first session) as well as to each child's personality and behavior problems.

The program encourages a commitment to parental self-management. We believe that this approach empowers parents in that it gives back dignity, respect, and self-control to parents who are often seeking help for their children's problems at a vulnerable time of low self-confidence and intense feelings of guilt and self-blame (Webster-Stratton & Spitzer, 1996). By using a group process, the program not only is more cost-effective but also addresses an important risk factor for children with conduct problems—namely, the family's isolation and stigmatization. The parent groups provide support and become a model for parent support networks. (For details of therapeutic processes, please see Webster-Stratton & Herbert [1994].)

The first two segments of the BASIC program focus on teaching parents to play with their children, fostering interactive and reinforcement skills. This material is derived from the early research of Hanf and Kling (1973) and Eyberg, Boggs, and Algina (1995). The third and fourth segments teach parents a specific set of nonviolent discipline techniques including commands, time-out, and ignoring, as described by Patterson (1976) and Forehand and McMahon (1981), as well as logical and natural consequences and monitoring. The fourth segment also shows parents ways to teach their children problem-solving skills (Shure, 1994). Tables 20.2 and 20.3 provide a brief description of the content of each of the parenting programs.

### TABLE 20.2 Content and Objectives of the Incredible Years BASIC Parent Training Programs (Ages 2-7 Years)

Content	Objectives	Content	Objectives
Program On	e: Play		
Part 1: How to Play With a Child	<ul> <li>Recognizing children's capabilities and needs</li> <li>Providing positive support for children's play</li> <li>Helping children develop imaginative and creative play</li> <li>Building children's self-esteem and self-concept</li> <li>Handling children's boredom</li> <li>Avoiding power struggles with children</li> <li>Understanding the importance of adult attention</li> </ul>	Part 2: Helping Children Learn	<ul> <li>Talking with children</li> <li>Understanding ways to create faster language development</li> <li>Building children's confidence in learning ability</li> <li>Helping children learn to problem solve</li> <li>Helping children deal with frustration</li> <li>Avoiding the criticism trap</li> <li>Making learning enjoyable through play</li> </ul>
_	: Praise and Rewards	<b>5</b>	_
	<ul> <li>Understanding ways to praise more effectively</li> <li>Avoiding praise of perfection only</li> <li>Recognizing common traps</li> <li>Handling children who reject praise</li> <li>Providing physical warmth</li> <li>Recognizing child behaviors that need praise</li> <li>Understanding the effects of social rewards on children</li> <li>Doubling the impact of praise</li> <li>Building children's selfesteem</li> </ul>	Part 2: Tangible Rewards	<ul> <li>Providing unexpected rewards</li> <li>Understanding the difference between rewards and bribes</li> <li>Recognizing when to use the "first-then" rule</li> <li>Providing ways to set up star and chart systems with children</li> <li>Recognizing ways to carry out point programs</li> <li>Understanding how to develop programs that are age appropriate</li> <li>Understanding ways to use tangible rewards for reducing or eliminating problems such as dawdling, not dressing, noncompliance, not sharing, fighting with siblings, picky eating, messy rooms, not going to bed, and messy diapers</li> </ul>

# TABLE 20.2 (Continued) Content and Objectives of the Incredible Years BASIC Parent Training Programs (Ages 2–7 Years)

Content	Objectives	Content	Objectives
Program Thr	ee: Effective Limit Setting		
Part 1: How to Set Limits	<ul> <li>Identifying important household rules</li> <li>Understanding ways to give more effective commands</li> <li>Avoiding unnecessary commands</li> <li>Avoiding unclear, vague, and negative commands</li> <li>Providing children with positive alternatives</li> <li>Understanding when to use the "when-then" command</li> <li>Recognizing the importance of warnings and helpful reminders</li> <li>Understanding ways to use problem-solving approaches</li> </ul>	Part 2: Helping Children Learn to Accept Limits	<ul> <li>Dealing with children who test the limits</li> <li>Understanding when to divert and distract children</li> <li>Avoiding arguments and "why games"</li> <li>Recognizing traps children set for parents</li> <li>Ignoring inappropriate responses</li> <li>Following through with commands effectively</li> <li>Helping children to be more compliant</li> </ul>
Part 3: Dealing With Non- compliance	<ul> <li>Understanding how to implement time-out for noncompliance</li> <li>Understanding ways to explain time-out to children</li> <li>Avoiding power struggles</li> <li>Dealing with children who refuse to go to time-out or refuse to stay in time-out</li> <li>Ignoring children's inappropriate responses</li> <li>Following through effectively and consistently</li> <li>Avoiding common mistakes concerning time-out</li> </ul>		

continues

# TABLE 20.2 (Continued) Content and Objectives of the Incredible Years BASIC Parent Training Programs (Ages 2–7 Years)

Content	Objectives	Content	Objectives
Program For	ur: Handling Misbehavior		
Part 1: Avoiding and Ignoring Misbehavior	<ul> <li>Anticipating and avoiding frustration</li> <li>Showing disapproval</li> <li>Ignoring and distracting</li> <li>Handling noncompliance, screaming, arguing, pleading, and tantrums</li> <li>Handling crying, grabbing, not eating, and refusing to go to bed</li> </ul>	Part 2: Time-Out and Other Penalties	<ul> <li>Explaining time-out to school-age child.</li> <li>Using time-out for hittin behaviors</li> <li>Using the time-out chai with a toddler</li> <li>Explaining time-out to a toddler</li> <li>Using a time-out room with a toddler</li> <li>Using time-out to help stop sibling fights</li> <li>Following through when a child refuses to go to time-out</li> <li>Dealing with spitting</li> <li>Dealing with spitting</li> <li>Dealing with threats</li> <li>Understanding and establishing logical consequences</li> <li>Coping when discipline doesn't work</li> <li>Dealing with the telephone syndrome</li> <li>Dealing with the TV syndrome</li> </ul>
eventive rategies •	Encouraging sharing and cooperation among children Using puppets and story books to teach children social skills Talking and listening effectively Problem solving with children Reviewing points to remember when using time-out	·	

## TABLE 20.3 Content and Objectives of the Incredible Years BASIC Parent Training Programs (Ages 5–12 Years)

Content	Objectives	Content	Objectives
Program Ni	ne: Promoting Positive Beh	aviors in Sch	ool-Age Children
Part 1: The Importance of Parental Attention	<ul> <li>Providing positive support for children's play</li> <li>Helping children develop imaginative and creative play</li> <li>Building children's selfesteem and selfconfidence through supportive parental attention</li> <li>Understanding the importance of adult attention for promoting positive child behaviors</li> <li>Understanding how lack of attention and interest can lead to child misbehaviors</li> </ul>	Part 2: Effective Praise	<ul> <li>Knowing how to use praise more effectively</li> <li>Avoiding praising only perfection</li> <li>Recognizing common traps</li> <li>Knowing how to deal with children who reject praise</li> <li>Providing physical warmth</li> <li>Recognizing child behaviors that need praise</li> <li>Understanding the effects of social rewards on children</li> <li>Doubling the impact of praise</li> <li>Building children's self-esteem and self-concept</li> </ul>
Part 3: Tangible Rewards	<ul> <li>Understanding the difference between rewards and bribes</li> <li>Recognizing when to use the "first-then" rule</li> <li>Understanding how to set up star and point systems with children</li> <li>Understanding how to design programs that are age-appropriate</li> <li>Understanding ways to use tangible rewards for problems such as dawdling, not dressing, noncompliance, not sharing, sibling fighting, picky eating, messy room, not going to bed, and toilet training</li> </ul>		

continues

# TABLE 20.3 (Continued) Content and Objectives of the Incredible Years BASIC Parent Training Programs (Ages 5–12 Years)

Content	Objectives	Content	Objectives
<b>Program Te</b>	n: Reducing Inappropriate	Behaviors in S	chool-Age Children
Part 1: Clear Limit Setting	<ul> <li>The importance of household rules</li> <li>Guidelines for giving effective commands</li> <li>How to avoid using unnecessary commands</li> <li>Identifying unclear, vague, and negative commands</li> <li>Providing children with positive alternatives</li> <li>Using "when/then" commands effectively</li> <li>The importance of warnings and helpful reminders</li> </ul>	Part 2: Ignoring Misbehavior	<ul> <li>Dealing effectively with children who test the limits</li> <li>Knowing when to divert and distract children</li> <li>Avoiding arguments and "why games"</li> <li>Understanding why it is important to ignore children's inappropriate responses</li> <li>Following through with commands effectively</li> <li>Recognizing how to help children be more compliant</li> </ul>
Part 3: Time-Out Con- sequences	<ul> <li>Guidelines for implementing time-out for noncompliance, hitting, and destructive behaviors</li> <li>How to explain time-out to children</li> <li>Avoiding power struggles</li> <li>Techniques for dealing with children who refuse to go to time-out or won't stay in time-out</li> <li>Recognizing common mistakes using time-out</li> <li>Understanding the importance of strengthening positive behaviors</li> </ul>	Part 4: Con- sequences, Extra Chores, and Start-Up Commands	<ul> <li>Guidelines for avoiding power struggles</li> <li>Recognizing when to use logical consequences, privilege removal, or start up commands</li> <li>Understanding what to do when discipline doesn't seem to work</li> <li>Recognizing when to ignore children's inappropriate responses and how to avoid power struggles</li> <li>Understanding how natural and logical consequences increase children's sense of responsibility</li> <li>Understanding when to use work chores with children</li> <li>Understanding the importance of parental monitoring at all ages</li> </ul>

### TABLE 20.3 (Continued) Content and Objectives of the Incredible Years BASIC Parent Training Programs (Ages 5–12 Years)

Content	Objectives	Content	Objectives
Part 5: Problem Solving With Children	Understanding the importance of adults not imposing solutions on children but rather fostering a "thinking process" about conflict     Recognizing how and when to use "guided solutions" for young children     Recognizing how to foster children's empathy skills     Understanding ways to encourage children's generation of solutions to problems     Learning how to help children think about and evaluate consequences to proposed solutions     Recognizing when children may be ready to problem solve on their own     Understanding how to use the problem-solving strategies in a family meeting	Part 6: Special Problems: Lying, Stealing, and Hitting	<ul> <li>Promoting open communication between adults and children</li> <li>Understanding the problem steps: (1) problem definition, (2) brainstorming, (3) evaluating, (4) planning and follow up</li> <li>Avoiding "blocks" to effective problem solving with children such as lectures, negative or quick judgments about solutions, excessive focus on the "right" answer, and the failure to validate a child's feelings</li> <li>Exploring the advantages and disadvantages and disadvantages of spanking versus grounding, versus timeout versus loss of privileges</li> </ul>

### Family Training Interventions

### Rationale for Broader-Based Training

Besides parenting behavior per se, other aspects of parents' behavior and personal lives constitute risk factors for child conduct problems. Researchers have demonstrated that factors such as parental depression, marital discord, lack of social support, and environmental stressors disrupt parenting behavior and contribute to relapses subsequent to parent training (for review see Webster-Stratton, 1990c). In our own analysis of the marital status of 218 parents of children with ODD and CD, we found that 75% of the sample had been divorced at least once or were currently in stressful marriages. Half of the married couples reported current experiences with spouse abuse. Further analyses revealed a direct link between negative

marital conflict management style and children's patterns of social interactions and conflict management with peers (Webster-Stratton & Hammond, 1999), in addition to an indirect path through the parenting style. Other studies also suggested that factors such as children's exposure to marital conflict (Grych & Finchman, 1992), physical aggression between spouses, and disagreements over child rearing (Jouriles, Norwood, McDonald, Vincent, & Mahoney, 1996) were key factors influencing the development of conduct disorders.

This evidence linking family risk factors other than parenting behavior such as marital distress and poor communication and problem-solving ability—to child conduct problems and treatment relapses led us to expand our theoretical and causal model concerning conduct problems. For example, rather than the child's conduct problems being the result of parenting deficits per se, we hypothesized that the child's conduct in general and poor peer interactions in particular are modeled from the marital interactions and parents' interpersonal skills with other adults. The child learns communication and problem-solving styles directly from observing his or her parents' interactions. In our revised model—a conflict-resolution-deficit model—we hypothesized that parents with children with ODD and CD have more general relational deficits in communication, conflict resolution, and affect regulation. We believe that these deficits are manifested in marital and interpersonal difficulties, inability to get support or cope with life stressors, problematic parenting, and difficulty in coping with child misbehaviors. These in turn exacerbate ineffectual parenting and thereby contribute to the coercive process leading to the development of child conduct problems (Dadds & Powell, 1991; Griest et al., 1982).

### Content of ADVANCE Training Program

In light of this research, plus the results of our long-term follow-ups indicating the potency of marital distress and divorce as predictors of treatment relapse, we developed the ADVANCE treatment program. We theorized that a broader-based training model (i.e., one involving more than parenting training) would help mediate the negative influences of these interpersonal factors on parenting skills and promote increased maintenance and generalizability of treatment effects. This program has the same theoretical basis as the BASIC parent skills training program—namely, cognitive social learning theory and a strong relationship focus. The therapeutic process and methods are also the same as for the BASIC program because our prior research had indicated that therapist-led parent group discussions and interactive videotape modeling techniques were highly effective methods of producing behavioral change and promoting interpersonal support. Moreover, we theorized that it would be a cost-effective alternative to the conventional format of individual marital or interpersonal therapy.

The content of this 14-session videotape program (60 vignettes), which is offered after the completion of the BASIC training program, involves four components:

- 1. Personal self-control: Parents are taught to substitute coping and positive self-talk for their depressive, angry, and blaming self-talk. This therapy component builds on well-established research and clinical writings (Beck, 1979; Lewinsohn, Antonuccio, & Teni, 1984; Meichenbaum, 1993). In addition, parents are taught specific anger management techniques.
- 2. Communication skills: Parents are taught to identify blocks to communication and to learn the most effective communication skills for dealing with conflict. This component builds on the communication work of Gottman, Notarius, Gonso, and Markman (1976) and the social learning—based marital treatment developed by Jacobson and Margolin (1979).
- 3. Problem-solving skills: In this component, parents are taught effective strategies for coping with conflict—whether with spouses, employers, extended family members, or children. These components build on the research by D'Zurilla and Nezu (1982) but are also influenced by the marital programs of Jacobson and Margolin (1979).
- 4. Strengthening social support and self-care: This concept is woven throughout all of the group sessions and components by encouraging the group members to ask for support when necessary and to give support to others. The content of both the BASIC and ADVANCE programs is also provided in the text that the parents use for the program entitled *The Incredible Years:* A *Troubleshooting Guide for Parents* (Webster-Stratton, 1992a; see Table 20.4).

### Academic Skills Training Intervention for Parents (SCHOOL)

### Rationale for Academic Skills Training

In follow-up interviews with parents who had completed our parent training programs, 58% requested guidance on how to encourage their children to do their homework; how to communicate with teachers concerning their children's behavior problems at school; and how to promote their children's reading, academic, and social skills. These data suggested a need for teaching parents how to access schools, collaborate with teachers, and supervise children's peer relationships. Clearly, integrating interventions across settings (home and school) and agents (teachers and parents) to target school and family risk factors fosters greater between-environment consistency and offers the best chance for long-term reduction of antisocial behavior.

**TABLE 20.4** Content and Objectives of the Incredible Years
ADVANCE Parent Training Programs (Ages 4–10 Years)

Content	Objectives	Content	Objectives
Program Fi	ve: How to Communicate Ef	fectively With	Adults and Children
Part 1: Active Listening and Speaking Up	<ul> <li>Understanding the importance of active listening skills</li> <li>Learning how to speak up effectively about problems</li> <li>Recognizing how to validate another's feelings</li> <li>Knowing how and when to express one's own feelings</li> <li>Avoiding communication blocks such as not listening, storing up grievances, and angry explosions</li> </ul>	Part 2: Commu- nicating More Positively to Oneself and to Others	<ul> <li>Understanding the importance of recognizing self-talk</li> <li>Understanding how angry and depressive emotions and thoughts can affect behaviors with others</li> <li>Learning coping strategies to stop negative self-talk</li> <li>Learning coping strategies to increase positive self-talk</li> <li>Increasing positive and polite communication with others</li> <li>Avoiding communication blocks such as put-downs, blaming, and denials</li> <li>Understanding the importance of seeing a problem from the other person's point of view</li> </ul>
Part 3: Giving and Getting Support	<ul> <li>Understanding the importance of support for a family or an individual</li> <li>Recognizing communication styles or beliefs that block support</li> <li>Fostering self-care and positive self-reinforcement strategies in adults and children</li> <li>Avoiding communication blocks such as defensiveness, denials, cross complaints, and inconsistent or mixed messages</li> <li>Knowing how to get feedback from others</li> </ul>		

# TABLE 20.4 (Continued) Content and Objectives of the Incredible Years ADVANCE Parent Training Programs (Ages 4–10 Years)

Content	Objectives	Content	Objectives
Part 3: Giving and Getting Support (continued)	<ul> <li>Understanding how to turn a complaint into a positive recommendation</li> <li>Promoting consistent verbal and nonverbal messages</li> <li>Knowing how to make positive requests of adults and children</li> <li>Understanding why compliance to another's requests is essential in any relationship</li> <li>Learning how to be more supportive to others</li> </ul>		
Program Six	: Problem Solving for Pare	nts	
Part 1: Adult Problem Solving	<ul> <li>Recognizing when to use spontaneous problem-solving skills</li> <li>Understanding the important steps to problem solving</li> <li>Learning how and when to collaborate effectively</li> <li>Avoiding blocks to effective problem solving such as blaming, attacks, anger, side-tracking, lengthy problem definition, missed steps, and criticizing solutions</li> <li>Recognizing how to use problem-solving strategies to get more support</li> <li>Learning how to express feelings about a problem without blaming.</li> </ul>	Part 2: Family Problem- Solving Meetings	<ul> <li>Understanding how to use the problem-solving steps with school-age children</li> <li>Recognizing the importance of evaluating plans during each problem-solving session</li> <li>Understanding the importance of rotating the leader for each family meeting</li> <li>Learning how to help children express their feelings about an issue</li> <li>Reinforcing the problem-solving process</li> </ul>

continues

# TABLE 20.4 (Continued) Content and Objectives of the Incredible Years ADVANCE Parent Training Programs (Ages 4–10 Years)

Content	Objectives	Content	Objectives
Program Se	even: Problem Solving With	Young Childre	en
Part 1: Teaching Children to Problem Solve Through Stories and Games	<ul> <li>Understanding that games and stories can be used to help children begin to learn problemsolving skills</li> <li>Appreciating the developmental nature and process of problem solving and learning how to enhance these skills in children</li> <li>Strengthening a child's beginning empathy skills or ability to understand a problem from another person's viewpoint</li> <li>Recognizing why aggressive and shy children need to learn these skills</li> <li>Learning how to help children think about the emotional and behavioral consequences to proposed solutions</li> <li>Knowing how to help older children evaluate their proposed solutions</li> <li>Understanding the importance of validating children make more positive attributions about another person's intentions</li> <li>Recognizing the value of adults modeling their ability to problem solve for children to observe</li> </ul>	Part 2: Teaching Children to Problem Solve in the Midst of Conflict	<ul> <li>Understanding the importance of not imposing solutions upon children but of fostering a thinking process about conflict</li> <li>Recognizing how and when to use guided solutions for very young children or for children who have no positive solutions in their repertoire</li> <li>Discovering the value of obtaining the child's feelings and view of the problem before attempting to problem solve</li> <li>Learning how to foster children's skills to empathize and perceive another's point of view</li> <li>Recognizing when children may be ready to problem solve on their own</li> <li>Avoiding blocks to effective problem solving with children, such as lectures, quick judgments, exclusive focus on the right answer, and failure to validate a child's feelings</li> </ul>

### Content of Academic Skills Training

In 1990 we developed an intervention using interactive videotape modeling skills training (SCHOOL) as an adjunct to our BASIC and ADVANCE interventions. This intervention consists of four to six additional sessions that are usually offered after the BASIC program. It focuses on parents' collaboration with teachers and their ability to foster their children's academic readiness and school success through involvement in school activities, homework, and peer monitoring. This program's methods are consistent with the BASIC and ADVANCE interventions (see Table 20.5).

This 6-session program involves six components:

- 1. Promoting children's self-confidence: Parents are taught to lay the foundation for their children's success at school by helping their children feel confident in their own ideas and in their ability to learn. Specifically, in this program we teach parents how to prepare their children for reading by teaching them the dialogic-reading approach (Whitehurst et al., 1988), ways to foster language development and problem solving, and ways to promote children's reading, writing, and story-telling skills.
- 2. Fostering good learning habits: Parents are taught to establish a predictable homework routine, set limits on time spent on television and computer games, and follow through with consequences for children who test these limits.
- 3. Dealing with children's discouragement: Parents are taught how to set realistic goals for their child and how to gradually increase the difficulty of the learning task as the child acquires mastery, using praise, tangible rewards, and attention to motivate and reinforce progress.
- 4. *Participating in homework:* Parents are taught ways to play a positive and supportive role in their children's homework.
- 5. Using teacher–parent conferences to advocate for the child: This segment shows parents how to collaborate with their children's teachers to jointly develop plans to address their children's difficulties, such as inattentiveness, tardiness, and aggression in school.
- 6. Discussing a school problem with the child: Parents discuss how to talk with their children about academic problems and how to set up a plan with them to maximize their success at school.

### TABLE 20.5 Content and Objectives of the Incredible Years Supporting Your Child's Education Parent Training Program

Content	Objectives	Content	Objectives
Program Eigl	ht: How to Support Your Cl	hild's Education	on
Part 1: Promoting Your Child's Self- Confidence	<ul> <li>Recognizing the capabilities of young children</li> <li>Providing positive support for children's play</li> <li>Helping children develop imaginative and creative play</li> <li>Building children's self-esteem and self-confidence in their learning ability</li> <li>Making learning enjoyable through play</li> <li>Teaching children to problem solve</li> <li>Understanding the importance of adult attention and listening skills for children</li> <li>Fostering children's reading skills and story telling through interactive dialogue, praise, and open-ended questions</li> </ul>	Part 2: Fostering Good Learning Habits	<ul> <li>Setting up a predictable routine</li> <li>Understanding how television interferes with learning</li> <li>Incorporating effective limit-setting regarding homework</li> <li>Understanding how to follow through with limits</li> <li>Understanding the importance of parental monitoring</li> <li>Avoiding the criticism trap</li> </ul>
Part 3: Dealing With Children's Discour- agement	<ul> <li>Helping children avoid a sense of failure when they can't do something</li> <li>Recognizing the importance of children learning according to their developmental ability and learning style</li> <li>Understanding how to build on children's strengths</li> <li>Knowing how to set up tangible reward programs to help motivate children in difficult areas</li> <li>Understanding how to motivate children through praise and encouragement</li> </ul>	Part 4: Partici- pating in Children's Homework	<ul> <li>Understanding the importance of parental attention, praise, and encouragement for children's homework activities</li> <li>Recognizing that every child learns different skills at different rates according to their developmental ability</li> <li>Understanding how to build on children's strengths</li> <li>Understanding how to show active interest in children's learning at home and at school</li> </ul>

### TABLE 20.5 (Continued) Content and Objectives of the Incredible Years Supporting Your Child's Education Parent Training Program

Content	Objectives	Content	Objectives	
Part 5: Using Parent— Teacher Confer- ences to Advocate or Your Child	Understanding the importance of parental advocacy for their children in school     Understanding how to focus on finding solutions to children's school difficulties (rather than blame)     Recognizing effective communication and problem-solving strategies in talking with teachers     Knowing ways to support teachers in their teaching efforts     Recognizing strategies to motivate children at school     Understanding the importance of continuity from home to school			

### Effectiveness of Parent and Family Interventions for Children With Oppositional Defiant Disorder or Conduct Disorder

Short- and Long-Term Outcomes

The efficacy of the Incredible Years BASIC parent program as an indicated intervention or treatment program for children (ages 3–8 years) diagnosed with ODD and CD has been demonstrated in six published randomized control-group trials (Webster-Stratton, 1981, 1982, 1984, 1990a, 1994, 1998; Webster-Stratton & Hammond, 1997; Webster-Stratton, Hollinsworth, & Kolpacoff, 1989; Webster-Stratton, Kolpacoff, & Hollinsworth, 1988). The program has been shown to be effective in significantly improving parental attitudes and parent—child interactions, along with significantly reducing parents' reliance on violent and critical disciplinary approaches and reducing child conduct problems, when compared with control groups and other treatment approaches. In addition, the program has been replicated by independent investigators in mental health clinics treating families of children with conduct problems (Scott, 1999; Spaccarelli, Cotler, & Penman, 1992; Taylor, Schmidt, Pepler, & Hodgins,

1998). Further, two of these replications were effectiveness trials—that is, they were conducted in applied settings, not a university research clinic, and the therapists were typical therapists at the center.

Several of the early studies used component analyses in an effort to discern the most effective ingredient of the treatment program. In the second randomized study with low-income single mothers of children with conduct problems, the therapist-led, group-discussion BASIC program was compared with the individualized one-to-one parent training approach with a therapist using "bug-in-the-ear" (i.e., small microphone worn in parent's ear so that therapist can coach parent while interacting with his or her child) feedback and individual coaching (Webster-Stratton, 1984). Results indicated that the BASIC program was more effective than the one-to-one program and was found to be five times more cost-effective, using 48 hours of therapist time versus 251 hours in the one-to-one program. A third study was conducted to ascertain which element of the overall BASIC program (i.e., group support and discussion, therapist leadership, or videotape modeling) contributed most to its effectiveness. Results indicated that the combined treatment condition that included videotape modeling plus therapist-led group discussion was consistently favored over the other approaches, which used group discussion only or individualized self-administered video modeling (IVM: Webster-Stratton et al., 1988; Webster-Stratton et al., 1989). One year later, results from 93% of the original sample indicated that all the significant improvements reported immediately after treatment were maintained. Moreover, two thirds of the sample showed clinically significant improvements. Of particular interest was the finding that the IVM—that is, the intervention without therapist feedback or group support—was also shown to be modestly effective (Webster-Stratton, 1990a, 1992b).

Three years after treatment, by which time all the children were enrolled in school, we assessed 82.1% of the families again to determine any long-term differences between treatment groups in terms of numbers of relapses and children's functioning at school and home. Follow-up reports from parents and teachers indicated that only the combined videotape modeling group discussion treatment achieved stable improvements; the other two treatment groups showed significant relapses. These data suggested the importance of therapist leadership and parent group support in conjunction with videotape modeling in producing the most effective results in terms of producing significant behavior change that not only generalizes across settings and over time but is also highly cost-effective, with good consumer satisfaction.

Nonetheless, evaluation of the clinical significance of the treatment programs indicated that, after 3 years, 25% to 46% of parents were concerned about school-related problems, such as peer relationships, aggression, noncompliance, and academic underachievement. Data from parents pointed to a need to help parents become more effective in supporting their

child's education and in collaborating with their child's teacher in addressing their child's social and academic problems. Data from teachers revealed a need to expand the intervention to include training for teachers in ways to manage classroom behavior problems and in ways to collaborate with parents (Webster-Stratton, 1990b). These data led us to develop the parent academic skills training intervention (SCHOOL) described earlier, as well as the teacher training intervention, which will be described shortly.

Of particular interest were the findings in the third study regarding the IVM. In contrast to the control families, the IVM treatment resulted in significant improvements in child conduct problems (as reported by parents) and in parent-child interactions (according to independent observers). These findings are rather remarkable in light of the fact that these multiproblem families had no direct therapist contact or group support throughout the entire training series, and they suggest that parents who are motivated can learn to change their own and their children's behaviors by means of a self-administered program. Clearly, this is the most cost-effective alternative and has major implications for treatment and prevention. In a fourth randomized study, we evaluated the added effects of combining brief therapist consultation to IVM treatment in an attempt to enhance its effectiveness while maintaining its cost-effectiveness. Comparing IVM, IVM plus therapist consultation (IVMC), and a wait-list control group at pretreatment, posttreatment, and 1 year later, our fourth study found that both treatment groups of mothers reported significantly fewer child behavior problems, reduced stress levels, and less use of spanking than the control group. Home visit data indicated that both treatment groups exhibited significant behavioral changes that were maintained 1 year later. There were relatively few differences between the two treatment conditions on the ourcome measures. However, the children in the IVMC group were significantly less deviant than the children in the IVM group, suggesting that therapist consultation improves this treatment approach (Webster-Stratton. 1990a, 1992b). These findings have implications for reaching many more families in cost-effective treatment or prevention programs to help prevent behavior problems from escalating in the first place.

In a fifth study, we examined the effects of adding the ADVANCE intervention component to the BASIC intervention (Webster-Stratton, 1994). Parents of 78 families with children with ODD and CD received the initial BASIC parent training and then were randomly assigned to either ADVANCE training or no further contact. In both treatment groups, significant improvements were noted in child adjustment and parent—child interactions, as well as a decrease in parental distress and child behavior problems. These changes were maintained at follow-up. Children in the ADVANCE group showed significant increases in the total number of solutions generated during problem solving, most notably in prosocial solutions (as compared to aggressive solutions), compared with their counterparts.

Observations of parents' marital interactions indicated significant improvements in ADVANCE parents' communication, problem solving, and collaboration skills when compared with parents who did not receive ADVANCE. Only one family dropped out of the ADVANCE program, which attests to its perceived usefulness by families. All the families attended more than two thirds of the sessions, with the majority attending over 90% of sessions. Parents in the ADVANCE group reported significantly greater consumer satisfaction than did parents who did not receive ADVANCE, with parents reporting the problem-solving skills to be the most useful and anger management the most difficult.

Next we looked at the ways in which clinically significant improvements (30%) in parents' communication and problem-solving skills were related to improvements in their parenting skills. We found that, in the case of fathers, improvement in marital communication skills was associated with a significant reduction in the number of criticisms in their interactions with their children; fathers' improved marital communication was also related to improvements in the child's prosocial skills. These results indicate the importance of fathers' marital satisfaction as a determining factor in their parenting skills.

Overall, these results suggest that focusing on helping families to manage personal distress and interpersonal issues through a videotape modeling group discussion treatment (ADVANCE) is highly promising in terms of (a) improvements in marital communication, problem solving, and coping skills; (b) improvements in parenting skills; (c) improvements in children's prosocial skills; and (d) consumer satisfaction—that is, being highly acceptable and perceived as useful by families (Webster-Stratton, 1994). As a result of these findings, we combined BASIC plus ADVANCE plus SCHOOL into an integrated 22- to 24-week program for parents, which has become our core treatment protocol for parents of children with conduct problems.

In a sixth study, we compared the effects of combining a child training intervention using the broader parent training program (BASIC + ADVANCE) with the broader parent training program without child training. With the broader parent training focus, we replicated our results from the prior ADVANCE study and were able to determine the added advantages of training children as well as parents. (See description of these study results later in this chapter, in the section on child training results.)

### Parent Training Treatment—Who Benefits and Who Doesn't?

As reported in the previous sections, we have followed families longitudinally (1, 2, and 3 years posttreatment) and are currently engaged in a 10- to 15-year follow-up. We have assessed not only the statistical significance of treatment effects but also the clinical significance of treatment effects. In our 3-year follow-up of 83 families treated with the BASIC

program, we found that 25% to 46% of parents and 26% of teachers still reported clinically significant child behavior problems (Webster-Stratton, 1990b). These findings are similar to other long-term treatment outcome studies that suggest that 30% to 50% of families relapse or fail to show continuous long-term benefits from treatment (e.g., Jacobson, Schmaling, & Holtzworth-Monroe, 1987; McMahon & Forehand, 1984; Wahler & Dumas, 1984). We also found that the families of children who had continuing externalizing problems (according to teacher and parent reports) at our 3-year follow-up assessments were 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, 1990b; Webster-Stratton & Hammond, 1990). We found that the best predictor of the amount of child deviance at home was single-parent status or marital adjustment. For families in which a father was present, the degree of negative life stress experienced by the father in the year after treatment was the best predictor of child deviance. Marital status was the best predictor of teacher reports of child adjustment. Thus, divorce, marital distress, and negative life stress were key predictors in determining the child's long-term treatment outcome (Webster-Stratton, 1990b; Webster-Stratton & Hammond, 1990).

Recently Hartman, Stage, and Webster-Stratton (2003) examined whether child risk factors (i.e., inattention, hyperactivity, and impulsivity problems) predicted less effective results from the parent training intervention (BASIC). Contrary to the researchers' hypothesis, the child factors made a significant contribution to decreasing conduct problems over time, suggesting that the children with ODD and CD who were comorbid for problems such as inattention, impulsivity, and hyperactivity made even greater gains in reducing conduct problems than children without these risk factors.

#### **Parent Training Prevention Studies**

Effectiveness of Parent Training Prevention Programs

In the past decade, we have evaluated the BASIC parent program as a selective prevention program in two randomized studies with Head Start families. In the first study, seven Head Start centers were randomly assigned to two conditions: (a) an experimental condition in which all parents were invited to participate in the parent intervention (BASIC), in addition to receiving the regular center-based Head Start program (n = 296); and (b) a control condition in which parents participated in the regular center-based Head Start program offerings (n = 130). Parent groups were led by trained facilitators who were family service workers employed by Head Start. At postassessment, blinded observer reports indicated that mothers participating in the intervention improved in all four parent behaviors during

interactions with their children; mothers made significantly fewer critical remarks and commands, used less harsh discipline, and were more nurturing, reinforcing, and competent compared with mothers in the control group (who remained stable). Mothers participating in the intervention reported that their discipline strategies also improved; mothers were more consistent, used fewer physical and verbally negative discipline techniques, and were more appropriate in their limit-setting techniques. In turn, the children of mothers in the intervention group exhibited significantly less misbehavior, noncompliance, deviance, and negative affect and more positive affect, whereas the control children's behavior remained unchanged. Similarly, teachers reported that the children participating in the intervention showed increased social competence, whereas the children in the control group remained stable. Teachers reported significant increases in parents' involvement and contact with school, whereas reports by teachers or parent involvement in the control group remained stable. One year later, when children were in kindergarten, improvements in the mothers' parenting skills and in their children's affect and behavior were maintained and continued to be significantly improved compared with families (Webster-Stratton, 1998), Furthermore, in a subsequent study we replicated these results with 272 Head Start mothers (Webster-Stratton, Reid, & Hammond, 2001a), as have two other independent investigators using the program as a prevention programs with Hispanic families in New York (Miller & Rojas-Flores, 1999; Brotman et al., 2003) and with day care providers and low-income African American mothers who had enrolled their toddlers in day care centers in Chicago (Gross, Fogg, Webster-Stratton, Gavey, & Grady, 2003).

Recently, we completed analyses of the combined data from both previously described Head Start studies in order to evaluate the effectiveness of the Incredible Years parenting program with four cultural groups. The sample included 634 families (370 Caucasian, 120 African American, 73 Asian, and 71 Hispanic) enrolled in 23 Head Start centers. Results indicated that, although there were some baseline differences in risk factors and parenting and child behaviors, there were few differential treatment responses according to ethnicity. All groups showed positive improvements that were sustained 1 year later relative to controls. There was also evidence that the effects of intervention on teachers' bonding with parents was more pronounced for minority mothers than for Caucasian mothers. Parents from all ethnic groups reported high satisfaction levels after the parenting groups than Caucasian parents. Results indicated that this program is acceptable and effective for use with diverse populations (Reid & Webster-Stratton, 2001).

In another study using the same combined Head Start population, we analyzed the effect of mothers' mental health risk factors on their engagement in the program and their ability to make positive changes in their parenting skills and children's behaviors. Although mothers with mental

health risk factors (i.e., depression, high levels of anger, history of abuse or harsh parenting as a child, and history of substance abuse) exhibited poorer parenting skills than mothers without these risk factors, these risk factors did not prevent the mothers from becoming engaged in the parenting training program. Furthermore, the mothers who had mental health risk factors benefited from the parenting training program at levels that were comparable to the mothers who did not have mental health risk factors, as did their children (Baydar, Reid, & Webster-Stratton, 2003).

### Summary and Significance of Parent Training

We hypothesized that because parents are the most powerful—and potentially malleable—influence on young children's social development, intervening with parents would be the most strategic first step. Indeed, our studies have shown that parent training is highly promising as an effective therapeutic method for producing significant behavior change in children with high-risk behaviors (i.e., conduct problems) and with high-risk populations (e.g., socioeconomically disadvantaged children). These findings (Reid, Webster-Stratton, & Baydar, 2004) provide support for the theory that parenting practices play a key role in children's social and emotional development. The parent intervention approach is also inexpensive, with good consumer satisfaction, regardless of parents' educational or socioeconomic background. Approximately 65% of families treated in the clinic achieved sustained improvements in their children's conduct problems. Moreover, our effects were further enhanced when we targeted other parental risk factors, such as marital distress, anger management, and maternal depression, in our ADVANCE intervention. These interventions strengthened parental coping skills and helped buffer the disruptive effects of these personal and interpersonal stressors on parenting and on children's social development. Nonetheless, when we looked at predictors of relapse and the failure of improvements in child behaviors to generalize beyond home to school and peer relationships, our long-term data suggested that our model concerning the development of conduct problems was incomplete. Collaboration with teachers to promote more sustained effects across the home and school settings seemed to be imperative.

### Incredible Years Teacher Training Intervention

### Rationale for Teacher Training

Once children with behavior problems enter school, negative academic and social experiences make key contributions to the further development of conduct problems. Aggressive, disruptive children quickly become socially excluded. This isolation leads to fewer opportunities to interact socially and to learn appropriate friendship skills. Over time, peers become mistrustful and respond to aggressive children in ways that increase the likelihood of

reactive aggression. Evidence suggests that peer rejection eventually leads to these children's association with deviant peers. Once children have formed deviant peer groups, the risk for drug abuse and antisocial behavior is even higher (for a review of this research see Coie, 1990).

Furthermore, researchers (e.g., Brophy, 1996) have found that teacher behaviors and school characteristics (e.g., low emphasis of teachers on social and emotional competence, infrequent praise, little attention to individualizing goals regarding specific social and academic needs for particular children, and high student-teacher ratio) were related to classroom aggressive behaviors, delinquency, and poor academic performance. High-risk children are often clustered in classrooms with a high density of other highrisk students, thus presenting the teacher with additional management challenges. Rejecting and nonsupportive responses from teachers further exacerbate the problems of aggressive children. Such children often develop poor relationships with teachers and receive less support, nurturing, and teaching and more criticism in the classroom. Some evidence suggests that teachers retaliate in a manner similar to parents and peers. Walker, Colvin, and Ramsey (1995) reported that antisocial children were less likely to receive encouragement from teachers for appropriate behavior and more likely to be punished for negative behavior than well-behaved children. Aggressive children are also frequently expelled from classrooms. The lack of teacher support and exclusion from the classroom exacerbate not only these children's social problems but also their academic difficulties; they also contribute to the likelihood of school dropout. Finally, recent research has shown that poorly managed classrooms have higher levels of classroom aggression and rejection that, in turn, influence the continuing escalation of individual child behavior problems (Kellam, Ling, Merisca, Brown, & Ialongo, 1998). A spiraling pattern of negative behavior in the child and reactivity in the teacher can ultimately lead to parent demoralization, withdrawal, and a lack of connection and consistency between the socialization activities of school and home. Although most teachers want to be active partners in facilitating the bonding process with parents, many lack the confidence, skills, or training to work collaboratively with families. Teacher education programs also devote scant attention to ways to build relationships and partnerships with parents and ways to successfully integrate social and emotional literacy curriculum in the academic curriculum.

This literature suggests that for high-risk children to benefit, intervention programs must promote healthy bonds or supportive networks between teachers and parents and between children and teachers. Strong family–school networks benefit children as a result of parents' increased expectations, interest in, and support for their child's social and academic performance and create a consistent socialization process across home and school settings. The negative cycle described previously can be prevented

when teachers develop nurturing relationships with students, establish clear classroom rules about bullying, prevent social isolation by peers, and offer a curriculum that includes training students in emotional literacy, social skills, and conflict management. Considerable research has demonstrated that effective classroom management can reduce disruptive behavior and enhance social and academic achievement (Brophy, 1996; Walker, Colvin, & Ramsey, 1995). Well-trained teachers can help aggressive, disruptive, and uncooperative children to develop the appropriate social behavior that is a prerequisite for their success in school.

### Content of the Incredible Years Teacher Training Program

The teacher training program is a 4- to 6-day (or 42-hour) program for teachers, school counselors, and psychologists that involves group-based training. Group-based training targets teachers' use of effective classroom management strategies for dealing with misbehavior; promoting positive relationships with difficult students; strengthening social skills in the classroom, as well as the playground, bus, and lunchroom; and strengthening teachers' collaborative process and positive communication with parents (e.g., the importance of positive home phone calls, regular meetings with parents, home visits, and successful parent conferences). For indicated children (i.e., children with conduct disorder), teachers, parents, and group facilitators will jointly develop transition plans detailing classroom strategies that are successful with that individual child; goals achieved and goals still to be worked on; characteristics, interests, and motivators for the child; and ways parents would like to be contacted by teachers. This information is passed on to the following year's teachers. Additionally, teachers learn how to prevent peer rejection by helping the aggressive child learn appropriate problem-solving strategies and helping his or her peers to respond appropriately to aggression. Teachers are encouraged to be sensitive to individual developmental differences (e.g., variation in attention span and activity level) and biological deficits in children (e.g., unresponsiveness to aversive stimuli, heightened interest in novelty) and the relevance of these differences for enhanced teaching efforts that are positive, accepting, and consistent. Physical aggression in unstructured settings (e.g., playground) is targeted for close monitoring, teaching, and incentive programs. A complete description of the content included in this curriculum is described in the book that teachers use for the course, How to Promote Social and Emotional Competence in Young Children (Webster-Stratton, 2000; see Table 20.6).

### TABLE 20.6 Content and Objectives of the Incredible Years Teacher Training Program (Ages 4–10 years)

Content	Objectives	Content Objectives	
Program One: The Importance of Teacher Attention, Encouragement, and Praise		Program Two: Motivating Children Through Incentives	
	<ul> <li>Using praise and encouragement more effectively</li> <li>Building children's selfesteem and selfconfidence by teaching children how to praise themselves</li> <li>Understanding the importance of general praise to the whole group as well as individual praise</li> <li>Knowing the importance of praising social and academic behaviors</li> <li>Recognizing common traps</li> <li>Using physical warmth as a reinforcer</li> <li>Providing nonverbal cues of appreciation</li> <li>Doubling the impact of praise by involving other school personnel and parents</li> <li>Helping children learn how to praise others and enjoy others' achievements</li> </ul>	<ul> <li>Understanding why incentives are valuable teaching strategies for children with behavior problems</li> <li>Understanding ways to use an incentive program for social problems such as noncompliance, inattentiveness, lack of cooperation, and hyperactivity as well as for academic problems</li> <li>Setting up individual incentive programs for particular children</li> <li>Using group or classroom incentives</li> <li>Designing programs that have variety and build on the positive relationship between the teacher, child, and parent</li> <li>Using incentives in a way that fosters the child's internal motivation and focuses on the process of learning rather than the end product</li> <li>Providing unexpected rewards</li> <li>Appreciating the importance of involving parents in incentive programs</li> </ul>	

# TABLE 20.6 (Continued) Content and Objectives of the Incredible Years Teacher Training Program (Ages 4–10 years)

Content	Objectives	Content	Objectives
Program Three: Preventing Behavior Problems — The Proactive Teacher		Program Four: Decreasing Students' Inappropriate Behavior	
	<ul> <li>Preparing children for transitions</li> <li>Establishing clear, predictable classroom rules</li> <li>Using guidelines for giving effective commands or instructions</li> <li>Identifying unclear, vague, and negative commands</li> <li>Understanding the value of warnings and helpful reminders, especially for distractible and impulsive children</li> <li>Engaging children's attention</li> <li>Using nonverbal signals and cues for communication</li> <li>Recognizing the need for ongoing monitoring and positive attention</li> </ul>		<ul> <li>Knowing how to redirect and engage children</li> <li>Knowing how and when to ignore inappropriate responses from children</li> <li>Using verbal and nonverbal cues to reengage off-task children</li> <li>Understanding the importance of reminders and warnings</li> <li>Using guidelines for setting up time-out in the classroom</li> <li>Avoiding common mistakes in using time-out</li> <li>Handling common misbehaviors such as impulsivity, disengagement, noncompliance, tantrums, and disruptive behaviors</li> <li>Using the color cards system</li> <li>Recognizing when to use logical consequences or removal of privileges as discipline</li> </ul>

continues

### TABLE 20.6 (Continued) Content and Objectives of the Incredible Years Teacher Training Program (Ages 4–10 years)

Content	Teacher Training Prog		
	Objectives	Content	Objectives
Program Five: Building Positive Relationships With Students		Program Six: How to Teach Social Skills, Problem Solving, and Anger Management in the Classroom	
	<ul> <li>Building positive relationships with difficult students</li> <li>Showing students you trust and believe in them</li> <li>Fostering students' sense of responsibility for the classroom and their involvement in other students' learning as well as their own</li> <li>Giving students choices when possible</li> <li>Teaching students how to ask for what they want in appropriate ways</li> <li>Fostering listening and speaking skills between students</li> <li>Teaching students how to problem solve through role-plays and examples</li> <li>Promoting positive self-talk</li> <li>Implementing strategies to counter students' negative attributions</li> <li>Promoting positive relationships with students' parents</li> </ul>		<ul> <li>Helping increase children's awareness of different feelings and perspectives in social situations</li> <li>Building children's emotional vocabulary</li> <li>Understanding how to help children identify a problem and to generate possible solutions</li> <li>Helping children learn to think ahead to different consequences and to different solutions and how to evaluate the most effective solutions</li> <li>Helping children recognize their anger and learn ways to manage it successfully</li> <li>Using puppets to present hypothetical problem situations such as being teased, bullied, or isolated by other children</li> <li>Providing small-group activities to practice friendship, group entry, play, and problem-solving skills</li> <li>Helping children learn how to use friendly talk such as giving compliments, providing suggestions, offering apologies, asking for help, and sharing ideas and feelings</li> <li>Helping children learn classroom behavior such as listening, quiet hand up, cooperating, and following teacher's directions</li> </ul>

directions

### Effectiveness of Teacher Training Program With Selective and Indicated Populations

Our first evaluation of the teacher training curriculum was conducted with teachers of children who had been diagnosed with ODD and CD. The randomized trial included 133 clinic-referred families, the majority (85%) of whom were Caucasian. Families were admitted to the study if their children (ages 4–8) met the *Diagnostic and Statistical Manual of Mental Disorders*, *Fourth Edition (DSM–IV)* criteria for early onset ODD or CD. Families were randomly assigned to one of six groups: (a) Parent training only (BASIC + ADVANCE) (n = 23); (b) Child training only (Dina Dinosaur Curriculum); (c) Parent training, academic skills training, and teacher training (BASIC + ADVANCE + SCHOOL + TEACHER); (d) Parent training, academic skills training, teacher training, and child training (BASIC + ADVANCE + SCHOOL + TEACHER + CHILD) (n = 22); (e) Child training and teacher training (CHILD + TEACHER) (n = 40); and (f) wait-list control group.

The parent training—only group received 22 two-hour weekly sessions covering the BASIC and ADVANCE components described previously. Those assigned to the child training—only group received 18 to 22 weeks of the Dina Dinosaur curriculum described in the next section. The third condition included the BASIC and ADVANCE program, as well as the academic skills (SCHOOL) and teacher training (TEACHER) programs. In this evaluation, the teacher program consisted of four full-day workshops offered monthly and a minimum of two school consultations, in which the parent and group facilitator met with the teacher to create an individual behavior plan for the targeted child. Clinic therapists made periodic phone calls to teachers to support their efforts and keep them apprised of the progress of the child at home. Families in the wait-list control condition were randomly assigned to the parent training condition after 8 or 9 months.

Immediately after testing, results indicated that combining parent academic-skills training with training for teachers improves children's outcomes by strengthening academic and social skills in the classroom, promoting more positive peer relationships, and reducing behavior problems at school and home. Classroom observations of teacher behavior showed that trained teachers were rated as less critical, harsh, and inconsistent and more nurturing than control teachers. Classroom atmosphere was also consistently better for those receiving teacher training. In addition, children in the teacher-training conditions showed significant increases in prosocial behaviors and academic competence and decreases in aggressive and antisocial behaviors, according to teacher report. Children whose teachers received the training were also observed by independent raters to improve in measures of peer aggression during structured and unstructured situations compared with children in the control group. In summary, short-

term results indicated that when teacher training was added to either parent training or child training, the effects on children's behaviors were enhanced at school over and above what would have been achieved by either intervention alone. Not only was aggressive behavior apparently reduced, social and academic behaviors were strengthened in the intervention conditions that added teacher training (Webster-Stratton, Reid, & Hammond, 2004).

Our second study evaluating the teacher training curriculum was conducted with 61 Head Start teachers and 272 mothers. Fourteen Head Start centers (34 classrooms) were randomly assigned to (a) an experimental condition in which parents, teachers, and family service workers participated in the prevention program (Incredible Years parent and teacher programs) or (b) a control condition consisting of the regular Head Start program (control). Results indicated that parent-teacher bonding was significantly higher for mothers in the experimental group than for mothers in the control group. Children in the experimental group showed significantly fewer conduct problems at school than children in the control group. After training, teachers in the experimental group showed significantly better classroom management skills than teachers in the control group (Webster-Stratton & Hammond, 1997). The teacher training curriculum has also been evaluated by an independent investigator studying its use among day care providers in Massachusetts, with significant results according to teacher reports (Arnold, Griffith, Ortiz, & Stowe, 1998).

### Incredible Years Child Training Intervention

### Rationale for Child Training

Moffit and Lynam (1994) have argued that some abnormal aspect of the child's internal organization at the physiological, neurological, and neuropsychological levels (which may be genetically transmitted) is linked to the development of CD, particularly for those whose conduct problems begin early in life. Children with conduct problems have been reported to be more likely to have certain temperamental characteristics, such as inattentiveness, impulsivity, and attention-deficit/hyperactivity disorder (ADHD; Lillenfield & Waldman, 1990). Researchers interested in the biological aspects of the development of conduct problems have investigated variables such as neurotransmitters, autonomic arousal system, skin conductance, and hormonal influences, and some findings suggest that such children may have low autonomic reactivity (i.e., low physiological response to stimuli). Other factors have also been implicated in child conduct disorder. For example, deficits in social-cognitive skills have been shown to contribute to poor emotional regulation and aggressive peer interactions (Dodge & Price, 1994). Additionally, studies indicate that children with conduct problems have significant delays in their peer play skills-in particular, difficulty with

reciprocal play, cooperative skills, turn taking, waiting, and giving suggestions (Webster-Stratton & Lindsay, 1999).

Finally, reading, learning, and language delays are also implicated in children with conduct problems, particularly for early life course persisters (Moffitt & Lynam, 1994). Low academic achievement often manifests itself in these children during the elementary grades and continues through high school. The relationship between academic performance and ODD or CD is bidirectional. Academic difficulties may cause disengagement, increased frustration, and lower self-esteem, which contribute to the child's behavior problems. At the same time, noncompliance, aggression, elevated activity levels, and poor attention limit a child's ability to be engaged in learning and achieve academically. Thus, a cycle is created in which one problem exacerbates the other. This combination of academic delays and conduct problems appears to contribute to the development of more severe CD and school failure.

The current research concerning the possible biological, sociocognitive, and academic or developmental deficits in children with conduct problems suggests the need for training programs that help parents and teachers understand children's biological deficits (their unresponsiveness to aversive stimuli and heightened interest in novelty) and support their use of effective parenting and teaching approaches so that they can continue to provide positive, consistent responses. The data regarding autonomic underarousal theory suggest that these children may require overteaching (i.e., repeated learning trials) to learn to inhibit undesirable behaviors and manage emotion. Parents and teachers must use consistent, clear, specific limit setting that uses simple language and concrete cues and reminders. Additionally, this information suggests the need to directly intervene with children, focusing on their particular social learning needs, such as problem solving, perspective taking, and play skills, as well as literacy and special academic needs.

One reason that the improvements in child behavior resulting from parenting training does not reliably generalize from home to schools might be the exclusive focus on parent skills as the locus of change—that is, the lack of attention in intervention programs to the role that child factors play in the development of conduct problems.

Content and Process of the Child Social Skills and Problem-Solving Training Intervention (Dinosaur Curriculum)

Our efforts to create a developmentally appropriate, theory-based intervention for aggressive preschool and early school-aged children were guided both by the available literature and by our own observations comparing children with OD and CD with behaviorally normal children (Webster-Stratton & Lindsay, 1999). Traditional social skills training programs typically did not have content directly relevant to CD and aggression. Our

program targets selected child risk factors (problem-solving and social skills deficits, peer rejection, loneliness, and negative attributions) and directly uses the child as an agent of change. The intervention is designed to enhance children's school behaviors and promote social competence and positive peer interactions, as well as nonaggressive conflict management strategies. In addition, the program teaches children how to successfully integrate themselves into the classroom, how to develop friendships, and how to play successfully with peers.

This 22-week program consists of a series of nine videotape programs (over 100 vignettes) that teach children problem-solving and social skills. Organized to dovetail with the content of the parent training program, the program consists of seven main components: (a) introduction and rules (1–2 sessions); (b) empathy training (2–3 sessions); (c) problem-solving training (3-4 sessions); (d) anger control (2-3 sessions); (e) friendship skills (3-4 sessions): (f) communication skills (2-3 sessions); and (g) school training. The children come to our clinic once a week to meet in small groups of six children for 2 hours. In this curriculum, we use videotape modeling examples in every session to foster discussion, problem solving, and modeling of prosocial behaviors. To enhance generalization, the scenes selected for each of the units involve real-life conflict situations at home and at school (playground and classroom). The tapes are paused so that the children can discuss feelings, generate ideas for more effective responses, and create alternative scenarios through role-playing exercises. In addition to interactive videotape modeling teaching, the therapists use life-size puppets to model appropriate behavior and thinking processes for the children. The use of puppets appeals to children on the fantasy level, which is very important for children in this preoperational age group. Because young children are more vulnerable to distraction, are less able to organize their thoughts, and have poorer memories, we use a number of strategies for reviewing and organizing the material to be remembered: (a) playing "copy cat" to review skills learned; (b) using many videotape examples of the same concept in different situations and settings; (c) using cartoon pictures and specially designed stickers as cues to remind children of key concepts; (d) engaging in role-playing exercises with puppets and other children to provide not only practice opportunities but also experience with different perspectives; (e) re-enacting videotape scenes; (f) acting out visual story examples of key ideas; (g) rehearsing skills with play, art, and game activities; (h) sending homework so children can practice key skills with parents; and (i) sending letters to parents and teachers that explain the key concepts children are learning and asking them to reinforce these behaviors whenever they see them occurring throughout the week. For example, if the concept being taught is teamwork, teachers and parents will be asked to reinforce any examples they see of children sharing, helping, and cooperating during the week and to give the child a note about these behaviors,

which is to be brought to the next session. (Teachers and parents receive special Dinosaur notes that they may use with the children.) More details about this intervention can be found in Webster-Stratton and Reid (2003); see also Table 20.7.

Child Dinosaur School Effectiveness With Indicated Populations (Children With ODD and CD)

To date, two randomized studies have evaluated the effectiveness of the child training program for reducing conduct problems and promoting social competence in children diagnosed with ODD and CD. In the first study, 97 clinic-referred children (72 boys and 25 girls), ages 4 to 7, and their parents (95 mothers and 71 fathers) were randomly assigned to one of four groups: a parent training treatment group (PT: BASIC + ADVANCE), a child training group (CT), a child and parent training group (CT + PT), or a wait-list control group (CON). Posttreatment assessments indicated that all three treatment conditions had resulted in significant improvements in comparison with controls. Comparisons of the three treatment conditions indicated that children in the CT and CT + PT groups showed significant improvements in problem solving as well as conflict management skills, as measured

TABLE 20.7
Content and Objectives of the Incredible Years
Child Training Programs (a.k.a. Dina Dinosaur Social Skills and Problem-Solving Curriculum) (Ages 4–8 Years)

Content	Objectives	Content	Objectives
Program One: Making Friends and Learning School Rules		Program Two: Understanding and Detecting Feelings	
Intro- duction to Dinosaur School	<ul> <li>Understanding the importance of rules</li> <li>Participating in the process of rule making</li> <li>Understanding what will happen if rules are broken</li> <li>Learning how to earn rewards for good behaviors</li> <li>Learning to build friendships</li> </ul>	Part 1: Wally Teaches Clues to Detecting Feelings Part 2: Wally Teaches Clues to Under- standing Feelings	<ul> <li>Learning words for different feelings</li> <li>Learning how to tell how someone is feeling from verbal and nonverbal expressions</li> <li>Increasing awareness of nonverbal facial communication used to portray feelings</li> <li>Learning different ways to relax</li> <li>Understanding why different feelings occur</li> <li>Understanding feelings from different perspectives</li> <li>Practicing talking about feelings</li> </ul>

continues

# TABLE 20.7 (Continued) Content and Objectives of the Incredible Years Child Training Programs (a.k.a. Dina Dinosaur Social Skills and Problem-Solving Curriculum) (Ages 4–8 Years)

Content	Objectives	Content	Objectives		
Program Three: Detective Wally Teaches Problem-Solving Steps					
Part 1: Identifying Problems and Solutions Part 2: Finding More Solutions Part 3: Thinking of Consequences	<ul> <li>Learning how to identify a problem</li> <li>Thinking of solutions to hypothetical problems</li> <li>Learning verbal assertive skills</li> <li>Learning how to inhibit impulsive reactions</li> <li>Understanding what apology means</li> <li>Thinking of alternative solutions to problem situations such as being teased and hit</li> <li>Learning to understand that solutions have different consequences</li> <li>Learning how to critically evaluate solutions—one's own and others</li> </ul>	Part 4: Detective Wally Teaches How to Control Anger Part 5: Problem Solving	<ul> <li>Recognizing that anger can interfere with good problem solving</li> <li>Understanding Tiny Turtle's story about managing anger and getting help</li> <li>Understanding when apologies are helpful</li> <li>Recognizing anger in themselves and others</li> <li>Understanding anger is okay to feel "inside" but not to act out by hitting or hurting someone else</li> <li>Learning how to control anger reactions</li> <li>Understanding that things that happen to them are not necessarily hostile or deliberate attempts to hurt them</li> <li>Practicing alternative responses to being teased, bullied, or yelled at by an angry adult</li> <li>Learning skills to cope with another person's anger</li> </ul>		

#### TABLE 20.7 (Continued)

Content and Objectives of the Incredible Years
Child Training Programs (a.k.a. Dina Dinosaur Social Skills
and Problem-Solving Curriculum) (Ages 4–8 Years)

Content	Objectives	Content	Objectives
Program Four: Molly Manners Teaches How to Be Friendly		Program Five: Molly Manners Explains How to Talk With Friends	
Part 1: Helping Part 2: Sharing Part 3: Teamwork at School Part 4: Teamwork at Home	<ul> <li>Learning what friendship means and how to be friendly</li> <li>Understanding ways to help others</li> <li>Learning the concept of sharing and the relationship between sharing and helping</li> <li>Learning what teamwork means</li> <li>Understanding the benefits of sharing, helping and teamwork</li> <li>Practicing friendship skills</li> </ul>		Learning how to ask questions and tell something to a friend Learning how to listen carefully to what a friend is saying Understanding why it is important to speak up about something that is bothering you Understanding how and when to give an apology or compliment Learning how to enter into a group of children who are already playing Learning how to make a suggestion rather than give commands Practicing friendship skills
Program Si	x: Dina Dinosaur Teaches Y	ou How to D	o Your Best in School
Part 1:	<ul> <li>Learning how to listen,</li> </ul>		

Part 1: Listening, Waiting, Quiet Hands Up Part 2:

Part 2: Concentrating, Checking, and Cooperating

- Learning how to listen, wait, avoid interruptions, and put up a quiet hand to ask questions in class
- Learning how to handle other children who poke fun and interfere with the child's ability to work at school
- Learning how to stop, think, and check work first
- Learning the importance of cooperation with the teacher and other children
- Practicing concentrating and good classroom skills

by observations of their interactions with a best friend; differences among treatment conditions on these measures consistently favored the CT condition over the PT condition. As for parent and child behavior at home, parents and children in the PT and CT + PT groups had significantly more positive interactions in comparison with parents and children in the CT group.

One-year follow-up assessments indicated that all the significant changes noted immediately after treatment had been maintained over time. Moreover, child conduct problems at home had significantly lessened over time. Analyses of the clinical significance of the results suggested that the combined CT + PT condition produced the most significant improvements in child behavior at 1 year follow-up (Webster-Stratton & Hammond, 1997).

## Who Benefits From Dinosaur Child Training?

Families of 99 children (ages 4–8 years) with ODD and CD, who were randomly assigned to either the child training treatment group or the control group, were examined in terms of the impact of three categories of risk factors (child hyperactivity, parenting style, and family stress) on treatment outcome. The hyperactivity and family stress risk factors did not seem to affect the children's ability to benefit from the child treatment program. By far the most important risk factor was negative parenting. Fewer children who had parents with one of the negative parenting risk factors (high criticisms or physical spanking) showed clinically significant improvements compared with 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 in addition to a child intervention is necessary (Webster-Stratton, Reid, & Hammond, 2001b).

### RECOMMENDATIONS AND FUTURE DIRECTIONS

In light of the research on risk factors over the past decade, which indicate the relationships between child and school risk factors and child conduct problems, treatment programs for children's conduct problems must address these risk factors as well as family and parent factors. Our latest studies with clinic populations suggest that adding teacher and child training components significantly enhances the effectiveness of treatment for such children.

We hypothesize that the more proactive and powerful approach to the problem of escalating aggression in young children would be to offer parent, teacher, and child training curriculum in strengthening social and emotional competence in schools as a school-based prevention intervention model for all children. Our reasons for this are threefold: First, offering

interventions in schools makes programs more accessible to families and eliminates some of the stigma associated with services offered in traditional mental health settings, as well as some practical and social barriers (e.g., lack of transportation). Second, offering interventions in schools allows such programs to be available before children's common behavior problems have escalated to the point that they require extensive clinical treatment. Moreover, when intervention is offered in natural communities, these communities become strengthened as a source of support for teachers and parents. A third advantage of interventions delivered by on-site school staff is the sheer number of high-risk families and children who can be reached at comparatively low cost. Finally, offering a social and emotional curriculum such as the Dinosaur School program to the entire class is less stigmatizing than creating a separate group and more likely to result in sustained effects across settings and time. Although we have shown that a child can learn new skills in separate sessions, the skills do not necessarily generalize back to the classroom. Because the peers have not been part of the intervention, peers will still react to the target child in negative ways because of his or her negative reputation. Including all the children in the intervention provides more opportunity for more prosocial children to model appropriate social and conflict management skills and provides the entire classroom with a common vocabulary and problem-solving steps to use in resolving everyday conflicts. Thus, social competence is strengthened for the lower-risk children, those with internalizing problems (e.g., social withdrawal and anxiety), as well as for the aggressive children, and the classroom environment generally fosters appropriate social skills on an ongoing basis. Additionally, with a classroom-based model, the dosage of intervention is magnified as teachers provide reinforcement of the key concepts throughout the day and week.

We are currently engaged in a randomized study evaluating the effects of a school-based intervention with two levels of intervention: (a) a universal intervention that includes teacher training and the Dinosaur School for all children in the classroom via a curriculum spanning preschool through second grade and (b) an indicated intervention that includes parent training (BASIC + SCHOOL + ADVANCE) offered over two grade levels for parents of the children who are exhibiting high-risk behaviors. Preliminary results are very promising. More information about the classroom-based version of Dinosaur School can be found elsewhere (Webster-Stratton & Reid, 2004).

Future research on children with ODD and CD should focus on the specific characteristics of families and children and how they relate to treatment outcome using various combinations of treatments. For example, because approximately 40% to 50% of young children with ODD and CD are also co-morbid for attention deficit disorder, learning delays, and internalizing problems, knowing how these children respond to treatment and whether these are the children that would benefit from the multifaceted interventions would seem particularly important. Long-term follow-ups of

these interventions are also needed to assess their ultimate impact on later development of delinquency, substance abuse, and antisocial behavior.

#### **SUMMARY**

In summary, a review of our own research suggests that comprehensive interactive videotape training methods are highly promising, especially for training those who work with young children with conduct problems and for high-risk populations such as Head Start. Our most effective parent intervention involved videotape training not only in parenting skills but also in marital communication, problem solving and conflict resolution, and ways to foster children's academic competence, as well as their social and emotional competence. These findings have pointed to the need for interventions that help strengthen families' protective factors—specifically, parents' interpersonal skills and coping skills—so that they can cope more effectively with their added stresses. Our research has also suggested that child and teacher training is a highly effective strategy for building social skills, problem-solving strategies, and peer relationships in young children with conduct problems. The child training program seems to be particularly helpful for children with conduct problems who are comorbid for ADHD and for children with peer relationship difficulties.

Our intervention studies, which target different combinations of risk factors, can be seen as an indirect test of the different theoretical models regarding the development of conduct disorders. We started with a simple parenting skills deficit model and have evolved to a more complex interactional model. In our current model, we hypothesize that the child's eventual outcome will depend on the interrelationship between child, parent (or parents), teacher (or teachers), and peer risk factors. Therefore, the most effective interventions should be those that involve schools, teachers, and the child's peer group. Optimally, one would assess these risk factors and determine the right match of program to the particular needs or risk factors of the family, child and school. Table 20.8 demonstrates the way treatment components may be combined depending on the risk status of the population and the pervasiveness of the child's problems.

Ideally a continuum of services should be provided to young children that assist children and families before diagnosed problems emerge; these services should also prevent those children who do have conduct problems from continuing on that trajectory. Given the increasing rates of aggression in younger children and the continuity of the problem from early childhood through adolescence and often into adulthood—with its implication for the intergenerational transmission of violence—the chance of breaking the link in the cycle of disadvantage is a public health matter of the utmost importance.

# TABLE 20.8 Selecting Program Components According to Risk Status of Population, Age, and Pervasiveness of Child's Problems

<del></del>					
Settings	Minimum core program	Recommended supplemental programs for special populations			
Prevention Programs for Selected Populations*					
Preschool, day care, Head Start, schools—	BASIC (12 to 14, 2-hour weekly sessions)	ADVANCE Parent Program for highly stressed families			
grades K-3, public health centers		SCHOOL Parent Program for children, kindergarten to Grade 3			
		Child Dinosaur Program if child's problems are pervasive at home and school			
		TEACHER Classroom  Management Program if teachers have high numbers of students with behavior problems or if teachers have not received this training previously			
Treatment Programs for Indicated Populations**					
Mental health centers, pediatric clinics, HMOs	BASIC and ADVANCE (22 to 24, 2-hour weekly sessions)	Child Dinosaur Program if child's problems are pervasive at home and at school			
•		TEACHER Program if child's problems are pervasive at home and at school			
		SCHOOL Program for parents if child has academic problems.			

<sup>\*&</sup>quot;High-risk" populations without overt behavior or conduct problems.

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<sup>\*\*</sup>Children exhibiting behavior problems or diagnosed conduct disorders.

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