Strengthening Social and Emotional Competence in Young Children Who Are Socioeconomically Disadvantaged

Preschool and Kindergarten School-Based Curricula

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The Early Childhood Longitudinal Study (ECLS), a nationally representative sample of more than 22,000 kindergarten children, suggests that exposure to multiple poverty-related risks increases the odds that children who are socioeconomically disadvantaged will demonstrate less social and emotional competence and more behavior problems than more economically advantaged children (West, Denton, & Reaney, 2001). Prevalence of social and emotional problems may be as high as 25% for preschool children who are socioeconomically disadvantaged (Rimm-Kaufman, Pianta, & Cox, 2000; Webster-Stratton & Hammond, 1998). These findings are of concern because research has indicated that children's social, emotional, and behavioral adjustment is as important for school success as cognitive and academic preparedness (Raver & Zigler, 1997). Although exposure to poverty does not necessarily lead to social and emotional problems for all children experiencing it, a significant portion of these children experience negative outcomes (Keenan, Shaw, Walsh, Delliquadri, & Giovannelli, 1997). Offord and col-

leagues found low income to be a significant risk factor for the early onset of conduct problems and academic deficits (Offord, Alder, & Boyle, 1986). Moreover, longitudinal data have led investigators to suggest that these early gaps in social competence for children who are socioeconomically disadvantaged persist and even widen over time. Researchers have determined that without intervention, early social, emotional, and behavioral problems (particularly aggression and oppositional behavior) are key risk factors or "red flags" marking the beginning of escalating academic problems, grade retention, school dropout, and antisocial behavior (Snyder, 2001; Tremblay, Mass, Pagani, & Vitaro, 1996; see also Chapter 10).

A number of curricula have been designed for children, teachers, and parents to promote children's social-emotional competence and prevent the development of behavior problems. Unfortunately, few of these have focused on preschool children, and most have not been evaluated for low-income and multicultural families. Early intervention, offered at school entry when behavior is most malleable, would seem to be a beneficial and cost-effective means of reducing the gap between these higher risk children and their more advantaged peers. Effective curricula at this strategic developmental stage can interrupt the progression of early social and emotional problems to poor school achievement and later academic failure. Moreover, strengthening protective factors such as young children's capacity to self-regulate emotions and behaviors, problem solve, and make meaningful friendships may help buffer the negative influences associated with impoverished living situations.

SUPPORTIVE PROTECTIVE FACTORS FOR YOUNG CHILDREN WHO ARE SOCIOECONOMICALLY DISADVANTAGED

How, then, do we assure that young children who are socioeconomically disadvantaged and struggling with a range of emotional and social problems receive the added support they need to develop social competence and self-regulatory skills? Parent training, curricula that address social skills, emotion regulation, problem solving, and teacher training address these issues.

Parent Training

Positive and nurturing parenting is one of the most important protective factors associated with children's resilience (Webster-Stratton & Fjone, 1989). Consequently, interventions that work with parents to strengthen positive parenting, enhance parent–child relationships, and reduce coercive and harsh parenting are the most effective means of promoting children's social competence and reducing behavior problems. In addition, positive parenting approaches have been shown to promote children's emotion-regulation skills, ability to manage conflict, and school readiness (Webster-Stratton & Reid, 2005). Parenting that is emotionally positive and that gives attention to pro-social behaviors is associated with self-regulation and conflict management skills. Conversely, researchers have found that children's lower emotional and social competencies are frequently associated with hostile parenting, high family conflict, and high rates of parental attention to negative behaviors (Cummings, 1994; Webster-Stratton & Hammond, 1999). Poverty and its related aggregation of risk factors can have deleterious effects on parenting (Baydar, Reid, & Webster-Stratton, 2003; Webster-Stratton, 1990c). Depressed, econom-

ically stressed, and unsupported parents are less likely to provide the cognitive stimulation and supportive parenting necessary to foster their children's academic performance and social behavior.

Parents, particularly those who are stressed and depressed, can find support in parent group programs designed to teach effective parenting and school collaboration strategies. Indeed, parent training programs have been the single-most successful intervention approach to date for reducing aggressive behavior problems and enhancing social competence (Brestan & Eyberg, 1998). A variety of parenting programs have resulted in clinically significant and sustained reductions in aggressive behavior problems for at least two thirds of young children treated (e.g., for review, see Chapter 14). The intervention goals of these programs are to reduce harsh and inconsistent parenting and promote home–school relationships. Experimental studies provide support for social learning theories that highlight the crucial role that parenting style and discipline effectiveness play in improving children's social competence and reducing behavior problems at home and school (Patterson, DeGarmo, & Knutson, 2000). More recently, efforts have been made to adapt these interventions for use as school-based prevention programs. A review of the literature on school-based parenting programs for early school-age children focusing on preventing poor behaviors indicates that this parent-training approach is very promising (Webster-Stratton & Taylor, 2001). Although there is little research available on school-based parenting programs for preschool children from multiethnic backgrounds, the preliminary studies are quite favorable.

Social Skills, Emotion Regulation, and Problem-Solving Curricula

A second approach for children at high risk of developing social difficulties and behavior problems is for teachers to provide direct instruction in social-emotional regulatory skills. This includes implementing social skills curricula focused on building emotional literacy, self-regulatory skills such as anger management and problem solving, and social skills (e.g., Coie & Dodge, 1998). Teaching these skills to young children who are at risk due to socioeconomic disadvantage can provide them with protective skills to help counteract or cope with various life stressors; however, many teachers acknowledge that they have little training in how to deliver social-emotional curricula. It is therefore necessary to provide teachers with training and materials in order to implement evidence-based social and emotional curricula with fidelity.

Teacher Training

A third approach to the problem of escalating behavior difficulties in preschool and kindergarten is to train teachers in the empirically validated classroom management strategies that are proven to enhance social and emotional competence and reduce aggression. Substantial evidence indicates that the way teachers manage misbehavior in the classroom affects children's social and emotional outcomes. Well-trained and supportive teachers who use high levels of praise and encouragement, proactive teaching strategies, and fair discipline, can play an extremely important role in the development of children's social and emotional skills. In fact, Burchinal, Roberts, Hooper, and Zeisel (2000) demonstrated that children from low-income families in high quality child care or preschool settings are significantly better off, cognitively, socially, and emotionally, than are similar children in low quality settings. Children

in preschools with low student–teacher relationships, low levels of problem behaviors, and opportunities for positive social interaction are more socially and academically competent during the first 2 years of school than children from disruptive classrooms. Moreover, having a supportive relationship with at least one teacher has been shown to be one of the most important protective factors influencing the later success of children considered high risk (Pianta & Walsh, 1998; Werner, 1999).

Research by Kellam, Ling, Merisca, Brown, and Ialongo (1998), however, showed that poorly managed classrooms have higher levels of overall aggression and rejection, leading to the development of individual children's aggressive behavior. As early as preschool, children with behavior problems and low social competence are less likely to be accepted by teachers, and they receive less academic instruction, support, and positive feedback for appropriate behavior than their peers who behave more appropriately (Arnold et al., 1999; Phillips, Voran, Kisker, Howes, & Whitebrook, 1994). Moreover, teachers are less likely to recognize cognitive competencies in young children whose behaviors they perceive as negative (Phillips et al., 1994). Low teacher emphasis on academics and social skills, low rates of praise and encouragement, and high teacher–student ratios are shown to be related to oppositional behaviors, low social competence, and poor academic performance. Rejecting responses from teachers further exacerbate the problems of children with social and emotional problems. A 1994 survey found that teachers serving children from predominantly low-income homes used significantly more harsh, detached, and insensitive teaching strategies than teachers serving children from middle income families (Phillips, et al, 1994; Stage & Quiroz, 1997). Providing training in effective classroom management is a part of the support necessary for a learning environment in which children can excel in school socially, emotionally, and academically.

This chapter reviews prevention curricula targeted at training parents, teachers, and children to promote young children's social and emotional competence and to decrease problem behaviors. To be included in this review, programs had to meet the following criteria:

1. The program had to include at least one published, randomized controlled group trial documenting effectiveness compared with an alternate intervention or control condition.

2. The program had to have been evaluated with young children (3–6 years of age).

3. Program outcomes had to have included increases in social competence and reductions in children's aggressive behavior.

4. The program could be replicable by others and was required to provide detailed manuals, training, or other curriculum guidelines.

Originally, we had planned to limit the review to programs that had been tested in a school setting with socioeconomically disadvantaged and multiethnic populations; however, we determined that doing so would limit the scope of the review too dramatically. Consequently, some promising programs that met all the other criteria were included even if they had not been tested in school settings with low-income populations. In addition, several exceptional programs that had been evaluated only with older elementary school children are included because they are

strong and comprehensive programs that could be considered for use with younger children. These exceptions are noted.

SPECIFIC TRAINING PROGRAMS

The following are descriptions of specific training programs in each of the three supportive/protective areas.

Parent Training Programs

Parent training programs based on cognitive social learning theory can counteract parent and family risk factors by helping parents develop positive relationships with their children and by teaching them to use nonviolent discipline methods that reduce behavior problems and promote social skills, emotional self-regulatory skills, problem-solving ability, and school readiness. These programs also help parents become actively involved in school.

Historically, parent training has not been delivered in the school setting. However, school-based parent programs have several advantages over traditional mental health settings. First, school-based programs are ideally placed to strengthen the parent–teacher–child links. Second, offering parent interventions in schools eliminates the stigma and some of the practical barriers (e.g., transportation, insurance, child care) that can be associated with traditional mental health services. Third, preventive school programs can be offered in early grades before children's minor behavior problems have escalated into severe symptoms that require referral and extensive clinical treatment. Fourth and finally, school-based interventions can reach a large number of families and children at high risk at comparatively low cost. Mounting evidence from several randomized controlled, longitudinal prevention programs shows that multimodal (parent–teacher–child) interventions delivered in schools can significantly lower behavior problems, promote social competence, and increase positive classroom and school atmosphere.(Webster-Stratton & Reid, 2002).

Positive Parenting Program

The *Positive Parenting Program* (*PPP*) is a system of parent interventions designed as a whole population prevention approach that includes low-income families (Sanders & Dadds, 1993). The program's multilevel framework permits one to offer parenting information universally through brief tip sheets or telephone contact for minor problems (level 1); brief advice (80 minutes or 1 to 2 sessions) for a discrete child problem (level 2); more intensive training (10 hours or 4 sessions) for moderate behavior problems (level 3); or individually tailored, group or self-directed programs (8 to 10 sessions) for families with severe child behavior problems (level 4). In addition, enhanced family interventions are provided when parenting difficulties are complicated by other sources of family problems (e.g., marital conflict). The program targets children from birth to adolescence and is offered in a variety of community settings. The *PPP* program is based on social learning models and teaches child management skills. It recognizes the importance of parental cognitions, expectancies, and beliefs as factors relating to self-efficacy

and decision making. Marital conflict and parental distress are also targeted for some levels of intervention.

A number of investigators have compared the various levels of intervention in the *PPP* program and their effectiveness for reducing oppositional behavior in young children (Sanders, 1996; Sanders & Christensen, 1985; Sanders & Dadds, 1993; Sanders, Markie-Dadds, Tully, & Bor, 2000). Investigators across studies indicate that the PPP program results in reductions of parent reports of disruptive child behavior. No studies were found evaluating the delivery of the program in preschools or reporting on its effectiveness in promoting social and emotional competence specifically in children who were economically disadvantaged.

Incredible Years Parents, Teachers, and Children's Training Series

The Incredible Years Parents, Teachers, and Children's Training Series is an overarching term for a number of programs comprising what will be referred to here as the *Incredible Years* (*IY*; http://www.incredibleyears.com). It is delivered in a group format and, like *PPP*, it includes child behavior management training as well as other cognitive behavioral and emotional approaches such as mutual problem-solving strategies, self-management principles, and positive self-talk (Webster-Stratton & Hancock, 1998). The content is embedded in a relational framework based on parent group support and a collaborative relationship with the group leader (Webster-Stratton & Herbert, 1994). There are two versions of the *IY* BASIC parent program, one for preschool children (ages 2–6 years) and one for early school-age children (ages 5–10 years). The content of both versions utilizes videotape examples to foster group discussion about child-directed play skills, social and emotional skills coaching, and problem solving as well as behavior management principles including differential attention, encouragement, praise, effective commands, time-out, consequences, monitoring, and problem solving. The school readiness program adds additional training in interactive reading skills, peer social and academic coaching skills, home–school collaboration, and homework. The BASIC program is 12–14 weeks long (2–2½ hours per week). A supplemental ADVANCED program (Webster-Stratton, 1990d) addresses a number of life stressors (depression, marital discord, lack of support, isolation) in greater depth. This program teaches parents to cope with upsetting thoughts and depression, to give and get support, and to communicate and problem solve with partners and teachers. The additional 10- to 14-week program enhances the effects of BASIC by promoting children's and parents' conflict management skills and self-control techniques (Webster-Stratton, 1994).

The efficacy of the *IY* parent program as an intervention program for children (ages 3–8 years) with conduct problems has been demonstrated in eight randomized trials by the developer (e.g., Webster-Stratton, 1981; Webster-Stratton, 1990b, 1994; Webster-Stratton & Hammond, 1997; Webster-Stratton, Reid, & Hammond, 2004). The program also has been replicated for children with conduct problems by four independent investigators (Mørch, Larsson, Clifford, Drugli, & Fossum, 2004; Scott, Spender, Doolan, Jacobs, & Aspland, 2001; Spaccarelli, Cotler, & Penman, 1992; Taylor, Schmidt, Pepler, & Hodgins, 1998).

The BASIC parent program was adapted as a prevention preschool and school-based program and evaluated by the developer and other investigators with low-income, multiethnic families (Barrera et al., 2002; Baydar et al., 2003; Miller

Brotman et al., 2003; Miller & Rojas-Flores, 1999; Reid, Webster-Stratton, & Hammond, in press; Webster-Stratton, 1998). Results in Head Start (Webster-Stratton, 1998; Webster-Stratton, Reid, & Hammond, 2001a) indicated that, following completion of the parent program, mothers who received intervention were more consistent, more nurturing, and less harsh than control mothers. Children considered aggressive whose mothers attended the parent program showed significant reductions in aggression and increases in prosocial behaviors compared with children in a control group. These results were maintained at 1-year follow up. Mothers with mental health risk factors, such as high depressive symptomatology, experience of physical abuse as children, substance abuse, and high levels of anger were able to engage in the program and benefit from it at levels comparable with mothers without these mental health risk factors (Baydar, Reid, & Webster-Stratton, 2003). Parents from various ethnic groups benefited in similar ways (Reid, Webster-Stratton, & Beauchaine, 2001).

Independent investigators have replicated these results in randomized controlled group studies with socioeconomically disadvantaged populations. One evaluated the program with low-income African-American mothers of toddlers in child care (Gross et al., 2003) and the other with low income Sure Start parents in Wales (Hutchings et al., 2007).

Coping Skills Parenting Program: A Community-Based Parenting Program

Another group-based parenting program for parents of young children is the *Coping Skills Parenting Program* developed by Cunningham, Bremner, and Boyle (1995). The curriculum includes strategies related to problem solving, attending to and rewarding prosocial behavior, transitions, "when–then" (i.e., a strategy that teaches children to anticipate problems and come up with solutions), ignoring, disengaging from coercive interactions, advanced planning for difficult situations, and time-out. Mixed groups of parents of children who are diagnosed with behavior-related problems and who are typically developing meet weekly for 12 sessions. This program uses a coping problem-solving model in which parents view videotaped models of parenting strategies for coping with common child management problems and then generate solutions. Leaders model solutions suggested by participants, and parents role-play the solutions and set homework goals.

This community school-based program was evaluated in a randomized controlled trial, comparing it either with individual parent training (with similar content) or to a no-intervention control. Native English speakers and families whose children exhibited moderate behavior problems were equally likely to participate in the groups or the clinic-based training. However, families for whom English was a second language and families with a child exhibiting severe problems were more likely to participate in the group format. Families who attended the groups reported significantly greater improvement in child behavior at posttest and at a 6-month follow-up. The group training was also substantially less expensive than the clinic-based intervention.

DARE to Be You

DARE to Be You, a 12-week group prevention program for parents of 2- to 5-year-old children who are high risk (Miller-Heyl, MacPhee, & Fritz, 1998), was designed to

promote parents' self-efficacy, effective childrearing strategies, understanding of developmental norms, social support, and problem-solving skills. In addition to the parent group, there are 10 parent–child practice sessions. The program was evaluated in a randomized controlled design with low-income and multiethnic populations (Ute Mountain Ute, Hispanic, Anglo-European). Parents reported significant positive changes in self-appraisals, democratic childrearing practices, and children's oppositional behavior (Miller-Heyl et al., 1998).

Summary of Parent-Focused Interventions

Individual, group, and self-administered parent training has been shown to improve parenting practices and reduce behavior problems in children who are socioeconomically disadvantaged. In these highly collaborative, nonprescriptive, and non-judgmental intervention models, parent factors such as depression, anger, prior experience with abuse, and poverty do not seem to affect parents' engagement in the program as long as logistical barriers such as transportation, dinners, and child care are provided as part of the program (Baydar, Reid, & Webster-Stratton, 2003).

Because of many issues that families living in poverty face, most of the programs described previously have added other components (e.g., curricula on communication, anger management, problem solving). These topics enhance parenting programs by focusing on building more supportive families. Such prevention programs also included meals, transportation, and child care as part of the delivery of their parenting interventions.

Combining Classroom-based Child Training (in Social Competence) with Parent Programs

A substantial number of researchers have provided evidence in the efficacy of preventive child training curriculum for improving elementary-age children and adolescents' social and emotional, behavioral, and cognitive skills (e.g., Greenberg, Domitrovich, & Bumbarger, 1999; Grossman et al., 1977; Weissberg, Barton, & Shriver, 1997; Weissberg & Greenberg, 1998). Effective programs often focus on teaching specific cognitive skills that improve children's social and emotional competence. More recently, similar programs have been developed for preschool and kindergarten that demonstrate a positive impact on children's social competence. A few of those programs have specifically focused on populations of children from low-income families (see descriptions) and have also recognized the importance of including parents in the intervention. The following is a description of classroom-based social and emotional interventions for young children and their families. Some of the programs described below have only been evaluated with elementary school-age children; however, a brief description is included here because of their implications for the preschool population.

First Step to Success

First Step to Success, a school-based selective prevention program (Walker et al., 1998), is designed for kindergarten children who exhibit early signs of antisocial behavior patterns. This program combines the CLASS program (a classroom-based intervention) for children who tend to have problems with acting out (Hops et al.,

1978), with a 6-week (1 hour per week) home-based parenting program in which parents are taught to provide adequate monitoring and reinforcement to help children build social competencies. The *CLASS* program (Hops et al., 1978) is a "game" played at school for a month, initially for 20 minutes per day, and gradually expanding to the whole day. During the first 5 days, a consultant sits beside the child with acting out problems to constantly monitor the child's on-task behavior using a card signal. Eventually, the teacher takes over the management of the card system. When the child receives enough points, the entire class wins a prize. Three randomized controlled trials have shown that this program (without the parent component) results in significantly higher levels of appropriate behavior in the classroom, and that benefits are maintained a year later with a new teacher (Hops et al., 1978; Walker, Retana, & Gersten, 1988). In a randomized evaluation of *First Step to Success* (*CLASS* plus the 6-week parent program), 46 kindergartners considered to be high-risk were randomly assigned to the intervention or wait-list control groups. One year later, students in the intervention groups were significantly more adapted, more engaged, and less aggressive than students in control groups. Follow-up results indicated that effects lasted over time (Epstein & Walker, 1999).

The Montreal Longitudinal Experimental Study

The Montreal Longitudinal Experimental Study, a school-based prevention program for boys at high risk, includes classroom social-cognitive skills training and a home-based parent training program. Tremblay and colleagues (Tremblay, Mass, Pagani, & Vitaro, 1996; Tremblay, Pagani, Masse, & Vitaro, 1995; Tremblay et al., 1996) identified 366 6-year-old boys who they determined to be disruptive and randomly assigned them to an intervention or a control condition. The intervention group received a school-based, small-group social skills program based on the work of Shure and Spivak (Shure, 1994; Shure & Spivak, 1982). Coaching, peer modeling, role-playing, and positive reinforcement methods were used to teach anger management and peer problem solving. Parents were offered home-based parent training once every 3 weeks over a 2-year span based on the Oregon Social Learning Center model (Patterson, Reid, Jones, & Conger, 1975). Children in group followed up when they were 12 showed that boys in the intervention condition had higher academic achievement, had committed less burglary and theft, and were less likely to get drunk or be involved in fights than were children from the control groups. These effects increased as the follow-up period lengthened.

Linking the Interests of Families and Teachers

Linking the Interests of Families and Teachers (LIFT) is a school-based, universal prevention program developed by Reid, Eddy, Fetrow, and Stoolmiller, (1999), for elementary school-age children and their families. Two versions of the program are available. The first is tailored to meet the needs of children in Grade 1 and their families; the second is for children making the transition to middle school. The core of the program is parent training over six sessions that promotes consistent and effective parental discipline techniques as well as close and appropriate supervision. This is combined with classroom-based, small-group interpersonal skills training (10 weeks, for a total of 20 hours). During recess, a version of the Good Behavior Game (Kellam et al., 1998) is used to encourage the use of positive skills (children receive

credit for good behavior toward class rewards). A controlled study of *LIFT* showed post-intervention reduction of playground aggression, improved classroom behavior, and reductions in maternal criticisms at home (Reid et al., 1999).

Combining Teacher Classroom Management Training with Parent and Child Training

Before successfully delivering a social skills curriculum in the classroom, teachers must be well trained in effective classroom management strategies and be able to manage misbehavior successfully (Webster-Stratton et al., 2001a). In fact, teacher training that focuses on helping teachers develop consistent classroom discipline plans and individualized behavior plans for children with behavior problems has been shown to produce increases in children's social competence even without a specific social skills curriculum (Cotton & Wikelund, 1990; Knoff & Batsche, 1995; Webster-Stratton et al., 2001a). Programs that have evaluated classroom management training for elementary school teachers have consistently demonstrated short-term improvements in disruptive and aggressive behavior in the classroom for approximately 78% of students considered disruptive (Stage & Quiroz, 1997). For example, The Seattle Social Development Project offered a preventive intervention that combined teacher and parent training to all families through the public schools (Hawkins et al., 1992). First-grade teachers were trained in proactive classroom management, interactive teaching, and cooperative learning and then were trained to implement the *I Can Problem Solve* (*ICPS*) curriculum developed by Shure and Spivak (1982). The program evaluation consisted of 643 students (first to fifth graders) from high crime areas in Seattle. Schools were assigned to intervention or control conditions. The 6-year follow-up (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999) with children who received the full 5-year school-based intervention, including parent training, indicated that students from the intervention group reported fewer violent delinquent acts, lower first drinking age, less sexual activity, and fewer pregnancies by 18 years, and better school achievement and bonding.

Incredible Years Teacher Training Series

The Incredible Years (IY) Teacher Training Series, a videotape-based, group discussion program, is designed to help teachers learn the classroom management strategies that will reduce aggression and behavior problems and promote preschool children's social, emotional, and academic competencies. The *IY Teacher Classroom Management Training Program* is a 6-day workshop (or 42 hours delivered weekly or bimonthly) for preschool, child care, and early school-age teachers that focuses on the following topics: developing positive relationships with difficult students and their parents; proactive teaching strategies; effective use of praise, encouragement, and incentives; development of an effective discipline hierarchy and individual supportive behavior plans for children targeted for services; and strategies to promote social and emotional competence and problem solving. Teachers are also taught techniques to engage children in learning, encourage language and reading development, and become social, emotional, academic, and persistence "coaches" for students. Teachers are encouraged to be sensitive to individual developmental differences (e.g., variation in attention span) and biological deficits in children (e.g., unresponsiveness to aversive stimuli, heightened interest in novelty) and the rele-

vance of these differences for teaching efforts that are positive, accepting and consistent. Physical aggression in unstructured settings (e.g., playground, during choice times) is targeted for close monitoring, teaching, and incentive programs. A theme throughout this training process is to strengthen the teachers' collaboration with parents to promote consistency in responses across settings.

This *IY* teacher-training program was evaluated with teachers who had children (4–8 years old) in their classrooms with diagnosed oppositional defiant disorder or conduct disorder (ODD/CD) (Webster-Stratton et al., 2004). Webster-Stratton and colleagues found that children whose teachers received training were significantly less aggressive and more socially competent in classroom observations than children in intervention conditions without teacher training. At the 2-year follow-up, teacher training added significantly to the parent and child training program outcomes in terms of children's school functioning (Reid, Webster-Stratton, & Hammond, 2003). Two years after intervention, significantly more children from the teacher training conditions were in the typical range, suggesting that intervention across multiple domains (teachers, parents, and children) is beneficial to children with pervasive conduct problems.

In a second randomized controlled study, the effects of the *IY Teacher Classroom Management Training Program* were evaluated with Head Start teachers of children 3–5 years old. The *IY* teacher program and the *IY* parent program were offered together in a randomized controlled group design with 272 families and 61 Head Start teachers (Webster-Stratton et al., 2001a). Results for parent outcomes were described previously in the parenting program section. Teachers in the Head Start intervention program promoted more parent involvement in the classroom, had a more positive classroom atmosphere, and were more positive and less harsh than were teachers in the control group. Children in the intervention classrooms exhibited significantly less noncompliance and physical aggression than did students in control classrooms. Children in the intervention group were more engaged and more socially competent and had higher school readiness skills than did children in the control group. Most of these improvements were maintained 1 year later (Webster-Stratton et al., 2001a). These results highlight the changes that can be made in children's social competence and school readiness by training teachers in proven classroom management strategies.

Social and Emotional Curricula for Young Children

Next, we review three curricula designed to promote social-emotional competence in preschool children, specifically targeting children from low-income families who are ethnically diverse.

Incredible Years Dina Dinosaur Classroom
Social, Emotional, and Problem-Solving Curriculum

The Incredible Years Dina Dinosaur Social, Emotional, and Problem-Solving Curriculum child training program is based on theory and research indicating the kinds of social, emotional, and cognitive deficits identified in children with behavior problems as well as theory-based behavior change methods (Webster-Stratton, 1990a). It focuses on learning school rules and how to be successful in school; emotional literacy, empathy, or perspective taking; interpersonal problem solving; anger man-

agement; and friendship and communication skills. Content is taught in a variety of ways including video vignettes, life-size puppets, dinosaur homework activities, books, cartoons, incentives, and picture cue cards. Parents and teachers are involved in the program through weekly dinosaur letters that explain how they can help reinforce the skills that the children are learning. In addition, homework activities are designed to be done by children with their parents. Comprehensive manuals outline every lesson's content, objectives, videotapes to be shown, and descriptions of small-group activities. More details about this curriculum can be found in an article by Webster-Stratton and Reid (2004), the curriculum manuals (Webster-Stratton, 1990a), and the book, *How to Promote Children's Social and Emotional Competence* (Webster-Stratton, 2000).

Researchers initially evaluated the curriculum as a small-group intervention for young children with diagnosed ODD/CD and established efficacy with that population (Webster-Stratton & Hammond, 1997; Webster-Stratton, Reid, & Hammond, 2001b; Webster-Stratton, Reid, & Hammond, 2004). In two randomized controlled group studies, 4- to 8-year-old children with externalizing behavior problems (ODD/CD) who participated in a weekly, 2-hour, 20- to 22-week intervention program showed reductions in aggressive and disruptive behavior according to independent, observed interactions of these children with teachers and peers. These children also demonstrated increases in pro-social behavior and conflict management skills compared with an untreated control group. These improvements in behavior were maintained 2 years later. Intervention was effective not only for externalizing behavior problems but also for comorbid hyperactivity, impulsivity, and attentional difficulties. Adding the child program to the *IY* parent program enhanced long-term outcomes for children who exhibited pervasive behavior problems across settings (home and school) by reducing behavior problems and improving social functioning in both settings (Webster-Stratton & Hammond, 1997; Webster-Stratton, Reid, & Hammond, 2004). These are the first randomized controlled studies with young children with special needs (ages 4–8 years) that have shown reductions in observed peer aggression.

The favorable impact of the Dina Dinosaur training led to an adaptation of this program for use as a prevention curriculum by preschool through third-grade teachers to promote social, emotional, and academic competencies in the classroom. The classroom version consists of more than 64 lesson plans per year and is delivered 2–3 times a week in a 15- to 20-minute large-group circle time followed by small group practice activities (Webster-Stratton & Reid, 2004). Teachers can choose from more than 300 small group activities that focus on social-emotional skills as well as other school readiness activities, such as pre-reading and pre-writing activities, math and science concepts, fine and gross motor skills, and creative art projects. Problem-solving practice and reinforcement from teachers take place in less structured settings, such as during choice time, in the lunchroom, or on the playground.

The curriculum was evaluated in a randomized study in Head Start and low-income elementary schools in the Seattle area (Webster-Stratton, Reid, & Stoolmiller, in press). Teachers received 4 days of training in this curriculum, which also included some classroom management training. Participants in the study were 1,791 multiethnic students (20% Asian, 18% Hispanic, 18% African American, 8% African, 26% Caucasion). Forty-four percent of students were non-native English speakers. The program was found to be highly effective. Independent observations

of children in the classrooms showed significant differences between control and intervention students on variables such as compliance and cooperation, social competence, and aggressive behavior. Intervention classrooms had significantly more positive classroom atmosphere than control classrooms. Moreover, students in intervention classrooms had significantly higher school readiness scores as measured by observed on-task behaviors, compliance during academic time, and cognitive concentration (Webster-Stratton, Reid, & Stoolmiller, & Reid, in press). Recently, this classroom-based intervention was used by two other research teams in combination with the *IY* parent program, and while the independent contribution of the child training program cannot be determined from their research designs, positive outcomes were reported in children's social interactions on the playground and academic variables (Barrera et al., 2002).

Promoting Alternative Thinking Strategies Curriculum

The *Promoting Alternative THinking Strategies* (*PATHS*) prevention curriculum (Kusche & Greenberg, 1994) was developed to promote children's social and emotional competence. It focuses on the skills of emotional literacy, positive peer relations, problem solving, and self-control. Topics include compliments, feelings, a self-control strategy, and problem solving. In addition to lessons, teachers create an environment that promotes social and emotional skills. *PATHS* was originally designed to be taught by elementary school teachers in Grades K–5 and included 131 lessons delivered over a 5-year period. Clinical trials of *PATHS* conducted with children from regular education and children with special needs (Greenberg, Kusche, Cook, & Quamma, 1995) showed that the program successfully improved social cognitions and emotion knowledge and reduced aggression and depression. These improvements were maintained at a 2-year follow-up. The degree of children's behavioral change was shown to be affected by the quality of the teacher's implementation of *PATHS* and quality of the principal's leadership.

The preschool *PATHS* curriculum (Domitrovich, Cortes, & Greenberg, 2006) is a 30-lesson preschool adaptation of *PATHS*. This preschool version of the program was tested with English-speaking children in Head Start programs in 20 classrooms (10 intervention and 10 control). Ten Head Start teachers received a 3-day training and delivered 30 lessons during "circle time." Children in the intervention group had higher emotion knowledge skills and were rated by teachers and parents as more socially competent and less socially withdrawn than children in a control group, although no changes occurred in problem solving or aggression (Domitrovich, Cortes, & Greenberg, 2006).

Al's Pals: Kids Making Healthy Choices

Al's Pals (Wingspan, 1999), designed for children 3 to 8 years old, was developed at the Virginia Institute for Developmental Disabilities. The goal of the program is to promote social-emotional competence in children who are living in stressful life conditions. It consists of 46 lessons implemented by trained teachers in a variety of settings including preschools and child care centers. The lessons are designed to help young children develop skills related to four components, including resiliency—social competence, problem solving, autonomy, and sense of purpose or belief in a bright future (Benard, 1993). The focus of *Al's Pals* is also to infuse

resilience-promoting concepts into teaching practices. The curriculum introduces children to topics such as understanding feelings, caring about others, accepting differences, establishing social relationships, managing anger, distinguishing between safe and unsafe situations, and solving problems peacefully. A trained adult leads two lessons a week over 23 weeks. Lessons last 15–20 minutes and include engaging activities, puppets, role-plays, music, books, pictures, and movement. Letters to parents explain what is being taught and offer home activities. A randomized study conducted in Head Start showed that teachers reported increased social independence, pro-social behaviors, and better coping in classrooms in which children received the intervention than in control classrooms (Lynch, Geller, & Schmidt, 2004).

Summary of Child-Focused and Teacher-Focused Interventions

Very few randomized controlled group studies focus on teacher classroom management training by itself as a method of promoting social competence and reducing aggression. However, almost all of the school-based prevention interventions have included some aspect of teacher training as part of their package of services for children of high risk and their parents. Because of this it is difficult to separate the individual contribution of the teacher-training portion of the intervention. Clearly, this would be the most cost-effective way of reaching many young children.

The three social-emotional curricula discussed previously show great promise in their ability to be used by teachers to increase social and emotional skills and reduce aggressive behavior problems in children who are socioeconomically disadvantaged. Each of these curricula focus on content related to emotional literacy, problem solving, anger management, and friendship skills and use child-friendly approaches such as puppets, games, and small group activities. The programs are developmentally appropriate and, as part of their intervention model, can be tailored to meet the needs of children from diverse backgrounds.

CONCLUSION

Several reports, such as the *Surgeon General's 2000 Report on Children's Mental Health* (U.S. Public Health Service, 2000) and *From Neurons to Neighborhoods: The Science of Early Childhood Development* (Shonkoff & Phillips, 2000) have highlighted the need for the adoption of evidence-based practices that support young children's social-emotional competence and prevent and decrease the occurrences of challenging behavior in early childhood. In this chapter, we describe programs for teachers, parents, and children that have evidence for their use in promoting social competence and reducing aggressive behavior problems. The evidence seems to point to the utility of using multiple, interconnecting programs that train parents and teachers to support each other using research-proven behavior management strategies for promoting children's social competence and reducing disruptive behaviors as well as for building strong relationships between parents, teachers, and children and a sense of classroom as family. Once the foundation of good behavior management and strong, nurturing relationships is in place, then classroom curriculum focused on building social skills, emotional literacy, and problem solving can further enhance children's academic competence and future social adjustment.

These programs are most effective when delivered with high fidelity, uphold-ing the integrity of the program's content, process, and methods and using proven behavior management strategies. The good news is that young children's behavior is malleable, and with comprehensive programs we can help children who are socioeconomically disadvantaged to be socially competent and have the skills they need to be successful academically. The warning is that researchers have shown that without these added supports and family interventions, a significant number of these children will continue on a trajectory toward academic failure, violence, and substance abuse.

REFERENCES

Arnold, D.H., Ortiz, C., Curry, J.C., Stowe, R.M., Goldstein, N.E., Fisher, P.H. (1999). Pro-moting academic success and preventing disruptive behavior disorders through commu-nity partnership. *Journal of Community Psychology, 27,* 589–598.

Barrera, M., Biglan, A., Taylor, T.K., Gunn, B., Smolkowski, K., Black, C. (2002). Early ele-mentary school intervention to reduce conduct problems: A randomized trial with His-panic and non-Hispanic children. *Prevention Science, 3*(2), 83–94.

Baydar, N., Reid, M.J., & Webster-Stratton, C. (2003). The role of mental health factors and program engagement in the effectiveness of a preventive parenting program for Head Start mothers. *Child Development, 74*(5), 1433–1453.

Benard, B. (1993). Fostering resiliency in kids. *Educational Leadership, 51*(3), 44–48.

Brestan, E.V., & Eyberg, S.M. (1998). Effective psychosocial treatments of conduct-disordered children and adolescents: 29 years, 82 studies, and 5,272 kids. *Journal of Clini-cal Child Psychology, 27,* 180–189.

Burchinal, M.R., Roberts, J.E., Hooper, S., & Zeisel, S.A. (2000). Cumulative risk and early cognitive development: A comparison of statistical risk models. *Developmental Psychology, 36,* 793–807.

Coie, J.D., & Dodge, K.A. (1998). Aggression and antisocial behavior. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology, fifth edition: Social, emotional and personality development* (Vol. 3, pp. 779–862). New York: Wiley.

Cotton, K., & Wikelund, K.R. (Eds.). (1990). *Schoolwide and classroom discipline.* Portland, OR: Northwest Regional Education Laboratory.

Cummings, E.M. (1994). Marital conflict and children's functioning. *Social Development, 3*(1), 16–36.

Cunningham, C.E., Bremner, R., & Boyle, M. (1995). Large group community-based parent-ing programs for families of preschoolers at risk for disruptive behaviour disorders: Uti-lization, cost effectiveness, and outcome. *Journal of Child Psychology and Psychiatry, 36,* 1141–1159.

Domitrovich, C., Cortes, R.C., & Greenberg, M. (2006). *Improving young children's social and emotional competence: A randomized trial of the preschool PATHS curriculum.* University Park, PA: Pennsylvania State University.

Epstein, M.H., & Walker, H.M. (1999). Special education: Best practices and first steps to suc-cess. In B. Burns, K. Hoagwood & M. English (Eds.), *Community-based interventions for youth with serious emotional disorders.* UK: Oxford University Press.

Greenberg, M.T., Domitrovich, C., & Bumbarger, B. (1999). *Preventing mental disorders in school-age children: A review of the effectiveness of prevention programs.* University Park, PA: Pre-vention Research Center, Pennsylvania State University.

Greenberg, M.T., Kusche, C.A., Cook, E.T., & Quamma, J.P. (1995). Promoting emotio-nal competence in school-aged children: The effects of the PATHS curriculum. Special issue: Emotions in developmental psychopathology. *Development and Psychopathology, 7,* 117–136.

Gross, D., Fogg, L., Webster-Stratton, C., Garvey, C.W.J., & Grady, J. (2003). Parent training with families of toddlers in child care in low-income urban communities. *Journal of Con-sulting and Clinical Psychology, 71,* 261–278.

Grossman, D.C., Neckerman, H.J., Koepsell, T.D., Liu, P.Y., Asher, K.N., Beland, K., (1977). Effectiveness of a violence prevention curriculum among children in elementary school. A randomized controlled trial. *Journal of the American Medical Association, 27,* 1605–1611.

Hawkins, J.D., Catalano, R.F., Kosterman, R., Abbott, R., & Hill, K.G. (1999). Preventing adolescent health-risk behaviors by strengthening protection during childhood. *Archives of Pediatrics and Adolescent Medicine, 153,* 226–234.

Hawkins, J.D., Catalano, R.F., Morrison, D.M., O'Donnell, J., Abbott, R.D., & Day, L.E. (1992). The Seattle social development project: Effects of the first four years on protective factors and problem behaviors. In J. McCord & R.E. Tremblay (Eds.), *Preventing antisocial behavior: Intervention from birth through adolescence* (pp. 162–195). New York: Guilford Press.

Hops, H., Walker, H.M., Hernandez, D., Nagoshi, J.T., Omura, R.T., Skindrug, K. (1978). CLASS: A standardized in-class program for acting out children. II Field test evaluations. *Journal of Educational Psychology, 70,* 636–644.

Hutchings, J., Bywater, T., Daley, D., Gardner, F., Whitaker, C., Jones, K., Eames, C., & Edwards, R.T. (2007). Parenting intervention in Sure Start for children at risk of developing conduct disorder: Pragmatic randomized controlled trial. *British Medical Journal,* 2007, pp. 1–7.

Keenan, K., Shaw, D.S., Walsh, B., Delliquadri, E., & Giovannelli, J. (1997). DSM-III-R disorders in preschool children from low-income families. *Journal of American Academy of Child and Adolescent Psychiatry, 36*(5), 620–627.

Kellam, S.G., Ling, X., Merisca, R., Brown, C.H., & Ialongo, N. (1998). The effect of the level of aggression in the first grade classroom on the course and malleability of aggressive behavior into middle school. *Development and Psychopathology, 10,* 165–185.

Knoff, H.M., & Batsche, G.M. (1995). Project ACHIEVE: Analyzing a school reform process for at-risk and underachieving students. *School Psychology Review, 24,* 579–603.

Kusche, C.A., & Greenberg, M.T. (1994). *The PATHS Curriculum.* Seattle, WA: Developmental Research and Programs.

Lynch, K.B., Geller, S.R., & Schmidt, M.G. (2004). Multi-year evaluation of the effectiveness of a resilience-based prevention program for young children. *The Journal of Primary Prevention, 24,* 3353–3353.

Miller Brotman, L., Klein, R.G., Kamboukos, D., Brown, E.J., Coard, S., & Stout Sosinksy, L. (2003). Preventive intervention for urban, low-income preschoolers at familial risk for conduct problems: A randomized pilot study. *Journal of Child Psychology and Psychiatry, 32,* 246–257.

Miller, L.S., & Rojas-Flores, L. (1999). *Preventing conduct problems in urban, Latino preschoolers through parent training: A pilot study.* New York: New York University Child Study Center.

Miller-Heyl, J., MacPhee, D., & Fritz, J.J. (1998). DARE to Be You: A family-support, early prevention program. *The Journal of Primary Prevention, 18,* 257–285.

Mørch, W.-T., Larsson, G., Clifford, G., Drugli, M.B., & Fossum, S. (2004). *Treatment of small children with conduct and oppositional defiant disorders.* Unpublished manuscript, University of Tromsø and Norwegian University of Technology and Science, Trondheim, Norway.

Offord, D.R., Alder, R.J., & Boyle, M.H. (1986). Prevalence and sociodemographic correlates of conduct disorder. *The American Journal of Social Psychiatry, 6,* 272–278.

Patterson, G.R., DeGarmo, D.S., & Knutson, N. (2000). Hyperactive and antisocial behaviors: Comorbid or two points in the same process? *Developmental and Psychopathology, 12,* 91–106.

Patterson, G.R., Reid, J.B., Jones, R.R., & Conger, R.W. (1975). *A social learning approach to family intervention* (Vol. 1). Eugene, OR: Castalia.

Phillips, D., Voran, M., Kisker, E., Howes, C., & Whitebrook, M. (1994). Child care for children in poverty: Opportunity or inequity? *Child Development, 65,* 472–492.

Pianta, R.C., & Walsh, D.J. (1998). Applying the construct of resilience in schools: Cautions from a developmental systems perspective. *School Psychology Review, 27,* 407–417.

Raver, C.C., & Zigler, E.F. (1997). Social competence: An untapped dimension in evaluating Head Start's success. *Early Childhood Research Quarterly, 12,* 363–385.

Reid, J.B., Eddy, J.M., Fetrow, R.A., & Stoolmiller, M. (1999). Description and immediate impacts of a preventive intervention for conduct problems. *American Journal of Community Psychology, 27*(4), 483–517.

Reid, M.J., Webster-Stratton, C., & Beauchaine, T.P. (2001). Parent training in Head Start: A comparison of program response among African American, Asian American, Caucasian, and Hispanic mothers. Prevention Science, 2(4), 209–227.

Reid, M.J., Webster-Stratton, C., & Hammond, M. (2003). Follow-up of children who received the Incredible Years Intervention for Oppositional-Defiant Disorder: Maintenance and prediction of 2-year outcome. *Behavior Therapy, 34,* 471–491.

Reid, M.J., Webster-Stratton, C., & Hammond, M. (in press). Preventing aggression and improving social, emotional competence: The Incredible Years Parent Training in high-risk elementary schools. *Journal of Clinical Child and Adolescent Psychology.*

Rimm-Kaufman, S.E., Pianta, R.C., & Cox, M.J. (2000). Teachers' judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly, 15,* 147–166.

Sanders, M.R. (1996). New directions in behavioral family intervention with children. In T.H. Ollendick & R.J. Prinz (Eds.), *Advances in clinical child psychology* (Vol. 18, pp. 283–320). New York: Plenum Press.

Sanders, M.R., & Christensen, A.P. (1985). A comparison of the effects of child management and planned activities training in five parenting environments. *Journal of Abnormal Child Psychology, 13*(1), 101–117.

Sanders, M.R., & Dadds, M.R. (1993). *Behavioral family intervention.* Needham Heights, MA: Allyn & Bacon.

Sanders, M.R., Markie-Dadds, C., Tully, L.A., & Bor, W. (2000). The Triple P-Positive Parenting Program: A comparison of enhanced, standard and self-directed behavioural family intervention for parents of children with early onset conduct problems. *Journal of Consulting and Clinical Psychology, 68,* 624–640.

Scott, S., Spender, Q., Doolan, M., Jacobs, B., & Aspland, H. (2001). Multicentre controlled trial of parenting groups for child antisocial behaviour in clinical practice. *British Medical Journal, 323*(28), 1–5.

Shonkoff, J.P., & Phillips, D.A. (2000). *From neurons to neighborhoods: The science of early childhood development.* Washington, DC: National Academies Press.

Shure, M. (1994). *I Can Problem Solve (ICPS): An interpersonal cognitive problem-solving program for children.* Champaign, IL: Research Press.

Shure, M.B., & Spivak, G. (1982). Interpersonal problem-solving in young children: A cognitive approach to prevention. *American Journal of Community Psychology, 10*(3), 341–356.

Snyder, H. (2001). Epidemiology of official offending. In R. Loeber & D. Farrington (Eds.), *Child delinquents: Development, intervention and service needs* (pp. 25–46). Thousand Oaks, CA: Sage Publications.

Spaccarelli, S., Cotler, S., & Penman, D. (1992). Problem-solving skills training as a supplement to behavioral parent training. *Cognitive Therapy and Research, 16,* 1–18.

Stage, S.A., & Quiroz, D.R. (1997). A meta-analysis of interventions to decrease disruptive classroom behavior in public education settings. *School Psychology Review, 26,* 333–368.

Taylor, T.K., Schmidt, F., Pepler, D., & Hodgins, H. (1998). A comparison of eclectic treatment with Webster-Stratton's Parents and Children Series in a children's mental health center: A randomized controlled trial. *Behavior Therapy, 29,* 221–240.

Tremblay, R.E., Masse, L.C., Pagani, L., & Vitaro, F. (1996). From childhood physical aggression to adolescent maladjustment: The Montreal prevention experiment. In R.D. Peters & R.J. MacMahon (Eds.), *Preventing childhood disorders, substance abuse and delinquency* (pp. 268–298). Thousand Oaks, CA: Sage Publications.

Tremblay, R.E., Pagani, K.L., Masse, L.C., & Vitaro, F. (1995). A biomodal preventive intervention for disruptive kindergarten boys: Its impact through mid-adolescence. Special Section: Prediction and prevention of child and adolescent antisocial behavior. *Journal of Consulting and Clinical Psychology, 63,* 560–568.

Tremblay, R.E., Vitaro, F., Bertrand, L., LeBlanc, M., Beauchesne, H., Boileau, H. (1996). Parent and child training to prevent early onset of delinquency: The Montreal longitudinal-experimental study. In J. McCord & R.E. Tremblay (Eds.), *Preventing antisocial behavior: Interventions from birth through adolescence* (pp. 117–138). New York: Guilford Press.

U.S. Public Health Service. (2000), *Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda.* Retrieved from Washington, DC: Department of Health and Human Services. Retrieved June 15, 2007, from http://www.surgeongeneral.gov/cmh/childreport.htm. Washington, DC: Department of Health and Human Services.

Walker, H.M., Kavanagh, K., Stiller, B., Golly, A., Severson, H.H., & Feil, E.G. (1998). First Step to Success: An Early Intervention Approach for Preventing School Antisocial Behavior. *Journal of Emotional and Behavioral Disorders, 6,* 66-80.

Walker, H.M., Retana, G.F., & Gersten, R. (1988). Replication of the CLASS program in Costa Rica. *Behavior Modification, 12,* 133–154.

Webster-Stratton, C. (1981). Modification of mothers' behaviors and attitudes through video-tape modeling group discussion program. *Behavior Therapy, 12,* 634–642.

Webster-Stratton, C. (1990a). *Dina Dinosaur's Social Skills and Problem-Solving Curriculum.* Seattle, WA: 1411 8th Avenue West.

Webster-Stratton, C. (1990b). Enhancing the effectiveness of self-administered videotape parent training for families with conduct-problem children. *Journal of Abnormal Child Psychology, 18,* 479–492.

Webster-Stratton, C. (1990c). Stress: A potential disruptor of parent perceptions and family interactions. *Journal of Clinical Child Psychology, 19,* 302–312.

Webster-Stratton, C. (1990d). *The Incredible Years Parent Training Program manual: Effective communication, anger management and problem-solving (ADVANCE).* Seattle, WA: The Incredible Years.

Webster-Stratton, C. (1994). Advancing videotape parent training: A comparison study. *Journal of Consulting and Clinical Psychology, 62,* 583–593.

Webster-Stratton, C. (1998). Preventing conduct problems in Head Start children: Strengthening parenting competencies. *Journal of Consulting and Clinical Psychology, 66,* 715–730.

Webster-Stratton, C. (2000). *How to promote social and academic competence in young children.* London: Sage Publications.

Webster-Stratton, C., & Fjone, A. (1989). Interactions of mothers and fathers with conduct problem children: Comparison with a nonclinic group. *Public Health Nursing, 6*(4), 218–223.

Webster-Stratton, C., & Hammond, M. (1997). Treating children with early-onset conduct problems: A comparison of child and parent training interventions. *Journal of Consulting and Clinical Psychology, 65,* 93–109.

Webster-Stratton, C., & Hammond, M. (1998). Conduct problems and level of social competence in Head Start children: Prevalence, pervasiveness and associated risk factors. *Clinical Child Psychology and Family Psychology Review, 1*(2), 101–124.

Webster-Stratton, C., & Hammond., M. (1999). Marital conflict management skills, parenting style, and early-onset conduct problems: Processes and pathways. *Journal of Child Psychology and Psychiatry, 40,* 917–927.

Webster-Stratton, C., & Hancock, L. (1998). Parent training: Content, methods and processes. In E. Schaefer (Ed.), *Handbook of parent training* (2nd ed., pp. 98–152). New York: Wiley.

Webster-Stratton, C., & Herbert, M. (1994). *Troubled families—problem children: Working with parents: A collaborative process.* New York: Wiley.

Webster-Stratton, C., & Reid, M.J. (2002). An integrated approach to prevention and management of aggressive behavior problems in preschool and elementary students: School-parent collaboration. In K. Lane, F. Gresham & T. O'Shaughnessy (Eds.), *Interventions for students with emotional and behavioral disorders* (pp. 261–272). Needham Heights, MA: Allyn & Bacon.

Webster-Stratton, C., & Reid, M.J. (2003). Treating conduct problems and strengthening social emotional competence in young children (ages 4–8 years): The Dina Dinosaur treatment program. *Journal of Emotional and Behavioral Disorders, 11*(3), 130–143.

Webster-Stratton, C., & Reid, M.J. (2004). Strengthening social and emotional competence in young children—The foundation for early school readiness and success: Incredible Years classroom social skills and problem-solving curriculum. *Infants and Young Children, 17*(2).

Webster-Stratton, C., & Reid, M.J. (2005). Treatment and prevention of conduct problems: Parent training interventions for young children (2–7 years old). In K. McCartney & D.A. Phillips (Eds.), *Blackwell handbook on early childhood development.* Malden, MA: Blackwell.

Webster-Stratton, C., Reid, M.J., & Hammond, M. (2001a). Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. *Journal of Clinical Child Psychology, 30*(3), 283–302.

Webster-Stratton, C., Reid, M.J., & Hammond, M. (2001b). Social skills and problem solving training for children with early-onset conduct problems: Who benefits? *Journal of Child Psychology and Psychiatry, 42*(7), 943–952.

Webster-Stratton, C., Reid, M.J., & Hammond, M. (2004). Treating children with early-onset conduct problems: Intervention outcomes for parent, child, and teacher training. *Journal of Clinical Child and Adolescent Psychology, 33*(1), 105–124.

Webster-Stratton, C., Reid, M. J., & Stoolmiller, M. (in press). Preventing aggression and improving social, emotional and school readiness: Evaluation of the Incredible Years Dinosaur Classroom Curriculum in high risk schools. Available from http://www.incredibleyears.com

Webster-Stratton, C., & Taylor, T. (2001). Nipping early risk factors in the bud: Preventing substance abuse, delinquency, and violence in adolescence through interventions targeted at young children (ages 0–8 years). *Prevention Science, 2*(3), 165–192.

Weissberg, R.P., Barton, H.A., & Shriver, T.P. (1997). The social competence promotion program for young adolescents. In G.W. Albee & T.P. Gullotta (Eds.), *Primary prevention works.* Thousand Oaks, CA: Sage Publications.

Weissberg, R.P., & Greenberg, M. (1998). School and community competence-enhancement and prevention programs. In I. Siegel & A. Renninger (Eds.), *Handbook of child psychology: Child psychology in practice* (Vol. 4). New York: Wiley.

Werner, E.E. (1999). How children become resilient: Observations and cautions. In N. Henderson, B. Benard & N. Sharp-Light (Eds.), *Resiliency in action: Practical ideas for overcoming risks and building strengths in youth, families, and communities* (pp. 115–134). Gorham, ME: Resiliency in Action.

West, J., Denton, K., & Reaney, L.M. (2001). *The kindergarten year: findings from the early childhood longitudinal study, kindergarten class of 1998–1999 (Publication No. NCES2001-023).* Washington, DC: Department of Education, National Center for Education Statistics.

Wingspan, L.L.C. (1999). *Al's Pals: Kids making healthy choices.* Richmond, VA.