Chapter 5
Evidence-Based Practices with Children and Their Caregivers

Abstract When delivering services to children and their caregivers, it is important for early intervention professionals to integrate their clinical expertise, the family's values, and the best research evidence into selecting strategies to improve developmental outcomes. Referred to as evidence-based practice, this process enhances both optimal outcomes and quality of life by utilizing interventions that have been documented through systematic research efforts.

Keywords Evidence-based practice • Clinical expertise • PICO • Efficacy • Case studies • Case control studies • Cohort studies • Randomized control trial • Systematic review • Meta-analysis • Treatment and control group • Validity • Confidence intervals • *P* value • Risks and benefits

Evidence-based practice (EBP) refers to a process in which scientifically supported interventions are selected to improve outcomes and/or reduce other complications that may otherwise impede healthy development. First described by medicine, EBP was described as "the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of an individual patient" (Sackett et al., 1996, p. 71). EBP integrates the provider's clinical expertise, patient values, and the best research evidence into the intervention process. Clinical expertise refers to the early intervention professional's cumulated experience, education, and skills. The child's caregivers bring their own personal and unique preferences, concerns, and values. And, the best evidence for the intervention is documented through carefully conducted and published research studies.

PICO is an acronym that helps practitioners frame a specific clinical question about which evidence will be sought. PICO stands for patient population or problem, Intervention, Comparison and Outcome. In thinking about the "P," patient population or problem, the key problems and characteristic of the child and family are described, which might be relevant in selecting the intervention. This might

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Table 5.1 Examples of PICO process to describe parenting programs

Population	Intervention	Comparison	Outcome
All caregivers and children ages 6 months to 5 years (primary prevention)	Reach Out and Read	• Online training • Cohort studies	• Increased receptive vocabulary • Increased frequency in reading activities
Caregivers of 18-month–5-year-old children, concerned with their child's behavior (secondary prevention)	Helping Our Toddlers, Developing Our Children's Skills	• Manualized program • Cohort and case studies	• Reduction in child behavior problems • Increase in caregiver knowledge and skills
Children with autism spectrum disorders, ages 18 months to 8 years (tertiary prevention)	Lovaas Applied Behavior Analysis (ABA)	• Manualized program • Two Cohort studies	• Improvements in IQ, language, and functional skills

include the primary referral problem, coexisting conditions, age, sex, or race. The "I" or intervention is the main intervention that one is considering in order to achieve certain goals. The "C" refers to how well the selected intervention compares to other interventions as well as to whether the information is specific enough to really describe what to do with the child and their caregivers. And, "O" refers to the outcome of interest, which could be both specific and functional. An example of the PICO process as used to address children presenting in well-child visits, children presenting with challenging behavior, and children with autism spectrum disorders is described in the Table 5.1.

To become recognized as evidence-based, a program must be documented through careful research and evaluation studies using rigorous scientific methods and procedures. This ensures that the interventions do more good than harm and are worth the efforts and costs of using them (Chorpita, 2003). There are many types of studies which are conducted in order to provide evidence of the intervention, sometimes referred to as the hierarchy of study design, and are used to document the evolution of the research literature. Starting first with ideas, these interventions are tested more and more rigorously in order to document their efficacy and safety. Types of studies going from lowest to highest level of design include Case Studies, Case Control Studies, Cohort Studies, Randomized Control Trial, Systematic Review, and Meta-analysis and are briefly described below:

Case studies consist of reports on the intervention used with a single individual or individuals, but there are no control groups with which to compare outcomes. Thus, case studies are not considered to have statistical validity.

Case control studies include studies in which individuals with a certain condition are compared with other people who do not have that condition. Often records such as medical or school reports are reviewed for data. This type of study is considered to be observational and not as reliable as randomized control studies.

Randomized control studies are studies in which individuals are randomly assigned to a treatment or control group, and their outcomes are documented and compared. This type of design helps to provide sound evidence of cause and effect.

Systematic reviews are conducted to review studies on a certain topic, in order to answer specific questions. The selected studies must have sound methodology in order to be included in the review.

Meta-analysis is a statistical method which is used to combine the results from several valid studies on a particular intervention and report it as if it were one study.

Early intervention providers seeking to engage in evidence-based practice must keep current with their professional literature, in order to know which interventions are the best suited for the children and families that they serve. There are three basic questions that need to be answered in order to evaluate any study:

1. Are the results of the study valid?
2. What are the results?
3. Will the results help in caring for my client(s)?

Validity refers to truthfulness or soundness of the study methodology. Some key aspects that support the validity of a study is the similarity of the treatment and control groups before the intervention, random assignment of individuals to treatment or control groups, and follow-up on the individuals who completed the study.

The results or outcomes of the study should also be presented in terms of statistical significance. Confidence intervals are a measure of the precision of a study, meaning the chance for error if the study were repeated again. Smaller intervals show greater precision. *P* value refers to the probability that any outcome would have arisen by chance. The smaller the *P* value, the higher the significance.

Lastly, it is important to make sure that the intervention selected is suitable for your client (s). First your client(s) must be comparable to the study participants to make sure that this is a good match. Second, make sure that published research supports the outcomes that you hope to attain. Programs can be described as *Possibly Efficacious* or *Well-Established* depending upon the degree of research evidence supporting their outcomes. *Possibly* Efficacious programs should include published case studies and case control studies, while well-established programs are supported by randomized control trials.

There are numerous advantages to EBP, namely that it encourages professionals to stay current and use the most appropriate information available in assisting their clients. In recent years, professional organizations such as the American Psychological Association (APA), the American Occupational Therapy Association, the American Nurses Association, and the American Physical Therapy Association have strongly encouraged their members to engage in EBP. As such, we have elected to employ the scheme proposed by Chambless and Hollon (1998) and APA Division 12 Task Force on Psychological Interventions which may be used to determine when a psychological treatment for a specific problem may be considered well established in efficacy or possibly efficacious. Well-established treatments include those in which benefits to clients have been replicated by at least one independent

research team(s). Possibly efficacious includes interventions that have published evaluation data that document improved outcomes for children and families but have not been replicated by independent teams.

The remainder of this chapter will review programs appropriate for the early childhood years that have documented effectiveness for the individuals and families targeted and are broadly grouped into two categories: (1) parent/child programs, and (2) child/classroom programs. Within each of these categories, programs are discussed according to their designation within the prevention model, i.e., primary, secondary, or tertiary. Details including target population, presentation, theoretical background, time and training requirements, costs, and empirical support will be covered in the narratives. Summary tables of each of the reviewed programs are found at the introduction of each section, with comparison ratings of Possibly Efficacious or Well-Established (Table 5.2). However, keep in mind that research efforts are continuous and over time new evidence may emerge that strengthens or challenges these approaches for certain populations or within certain circumstances.

Parent/Child Programs: Primary Prevention

Reach Out and Read (ROR) was the only primary prevention program identified as part of this review. ROR will be described below.

Reach Out and Read

Distinguishing Features

ROR can be distinguished from other programs by settings where it is put in place (primary care) and the universal approach it takes to ensuring all children get literacy exposure during the early years of development. ROR is usually implemented in pediatricians' offices where children would go to receive *well-child visits*. There are three separate components to the ROR program: (1) encouraging parents to read with their children and instructing parents on how this can be done, (2) providing every parent of a child 6 months to 5 years old with an age-appropriate book, and (3) having volunteer readers or providing early literacy materials in the waiting room.

Theoretical Grounding

ROR has developed out of research that documents the importance of exposing children to literacy prior to entering formal schooling. Additionally, the program also addresses research indicating that certain groups of families (low-income, minority, and nonnative English speakers) are difficult to reach and engage in early intervention practices (Zuckerman, 2009).

Table 5.2 Summary of parent/child programs using PICO process

	Population	Intervention	Comparison	Outcome
Primary prevention program				
Reach Out and Read	6 months to 5 years	Literacy exposure in well-child visits	Possibly efficacious	Higher receptive vocabulary; greater frequency of reading activities
Secondary prevention programs				
Helping Our Toddlers Developing Our Children's Skills	18–60 months	Behavioral parent training	Possibly efficacious	Decreased child behavior problems; Improved parenting skills; Increased engagement of fathers and Spanish speakers
Incredible Years	Birth-12 years	Behavioral parent training	Well-established	Decreased child behavior problems; Improved parenting skills; works well with low-income, racially and ethnically diverse families
Nurse-Family Partnership	Low-income mothers, prenatal-2 years	Preventive health care, positive parenting, self-sufficiency	Well-established	Improved health practices and parenting skills; long-term improvements in child outcomes
Parents are Teachers	Low-income families, birth-5 years	School readiness, positive parenting practices	Possibly efficacious	Improved health and school readiness, improved parenting practices
Tertiary prevention programs				
Helping the Noncompliant Child	3–8 years	Improved parenting skills and child behavior/compliance	Well-established	More compliance to adult direction, and improved parenting skills
Lovaas Applied Behavior Analysis	18 months to 8 years	Increased communication and functional skills for children with autism spectrum disorder (ASD)	Well-established	Improvement in communication, adaptive skills, increased IQ scores in older children
Parent–Child Interaction Therapy	2.5–7 years	Improved parenting skills and child behavior/compliance	Well-established	More compliance to adult direction, and improved parenting skills
Trauma-Focused Cognitive Behavior Therapy	3–17 years	Reduced PTSD symptoms; improved problem solving and coping skills	Well-established	Fewer PTSD symptoms, improved parenting skills
Multitiered programs				
Triple P	Birth-18 years	Create healthy families	Possibly efficacious	Reduced child behavior problems and parenting stress; improved parent mental health and relationships

Focus

The focus of ROR is to increase young children's exposure to print and improve the home literacy environment through providing books and parent instruction. ROR specifically targets children who are at risk for not being exposed to reading early in life. Children between the ages of 6 months and 5 years old are eligible to participate in this program.

Time Requirements

ROR occurs during regularly scheduled Well-Child Visit (WCV). The program begins with volunteer readers interacting with parents in the waiting room to model reading strategies or through the provision of information via pamphlets/fact sheets. As part of the physical exam, the physician or nurse suggests books and strategies that the caregiver may use to promote reading. This discussion may extend the appointment by a few minutes, but in general, the program does not require any time more than a typical WCV. The program targets infants and children from age 6 months to 5 years.

Child Participation

Children participate in the intervention with their parents by attending the doctor's visits and engaging in reading activities with the waiting room volunteer. Children also engage in the intervention after their doctor's visit is completed by reading with their parents.

Progress Monitoring Tools

There are no specific tools used with ROR to track child progress or frequency of parent–child reading activities. Books are recommended based upon developmental milestones.

Training Requirements/Cost

Information about ROR training is available through the website www.reachoutandread.org. Depending upon the number of physicians, nurses and other staff, and the location, a variety of training options are available. This includes a live training with an ROR Trainer and Provider, an online class for CME credit, or a simple premade presentation for the clinic staff. Training costs include copies of materials.

Materials

To reduce costs, many clinics have arranged for book donations and community volunteers through the ROR website. New books are available from the ROR organization for the cost of about $2.75 per book. Many materials (handouts, milestone fact sheets) are available from www.reachoutandread.org after providers register with this nonprofit organization. In addition, educators and parents can access the website for book lists, a sheet of milestones for literacy, and more information about reading to young children and the impact it can have.

Empirical Support

ROR has been investigated in 14 studies that have been published in the research literature and meets criteria for a *Possibly Efficacious* intervention program. Most studies included participants with low socio-economic backgrounds and/or minority racial and ethnic backgrounds. Parents who were in an ROR program have been shown to improve the frequency of engaging in reading-related activities (Golova, Alario, Vivier, Rodriguez, & High, 1999; High, Hopman, LaGasse, & Linn, 1998; High, LaGasse, Becker, Ahlgren, & Gardner, 2000; Mendelsohn et al., 2001; Needleman, Toker, Dreyer, Klass, & Mendelsohn, 2005; Sanders, Gershon, Huffman, & Mendoza, 2000; Silverstein, Iverson, & Lozano, 2002; Weitzman, Roy, Walls, & Tomlin, 2004). Additionally, receiving ROR has been shown to increase reports that children list reading as a favorite activity (High et al., 1998, 2000; Silverstein et al., 2002; Theriot et al., 2003; Weitzman et al., 2004). Finally, three studies have examined changes in child vocabulary skills and found that in general, exposure to the ROR program is related to higher receptive vocabulary (Mendelsohn et al., 2001; Sharif, Rieber, & Ozuah, 2002; Theriot et al., 2003).

Prevention Model Tier

ROR is considered a tier 1 prevention program since it is designed to be used with *all* children as a way to ensure exposure to reading and literacy early in life. This intervention is not time-intensive, has little cost associated with it, and is delivered in the same manner to all children.

Parent/Child Programs: Secondary Prevention

A review of secondary prevention programs identified four programs: *Helping Our Toddlers, Developing our Children's Skills, Incredible Years, Nurse-Family Partnerships, and Parents as Teachers*.

Helping Our Toddlers, Developing Our Children's Skills (HOT DOCS)

Distinguishing Features

Helping Our Toddlers, Developing Our Children's Skills (HOT DOCS; Armstrong, Lilly, Agazzi, & Williams, 2010) is a parenting program that was developed at the University of South Florida Department of Pediatrics. It can be distinguished from other parenting programs since it helps parents and caregivers apply a problem-solving model to understand and address challenging behaviors. HOT DOCS may be used in a group setting or with individual families (Curtiss, Armstrong, & Lilly, 2008). Information is conveyed through live and video-taped instruction, role playing, modeling, and practice exercises. The program is available in English and Spanish (Armstrong, Agazzi, Childres, & Lilly, 2012).

Theoretical Grounding

HOT DOCS is grounded in social learning, developmental, and attachment theories and combines behavioral approaches to learning within nurturing and responsive relationships (Armstrong, Hornbeck, Beam, Mack, & Popkave, 2006). The program also takes an ecological approach, by encouraging multiple caregivers to attend the training so that handling of the child's behavior is consistent across settings. Through changing the caregiver's behavior and responsiveness to the child, the child's functioning can be improved.

Focus

HOT DOCS uses a problem-solving chart with parents and caregivers that helps them understand why problem behavior occurs, and how to develop strategies that reduce or eliminate problem behaviors while teaching more adaptive skills. The program has documented improvement for children who are between the ages of 18 months and 6 years old, but has been used successfully with children outside of that range who have developmental disabilities (Williams, Armstrong, Agazzi, & Bradley-Klug, 2010).

Time Requirements

With group implementation, HOT DOCS consists of seven 2½ hour meetings, while individual implementation can occur weekly as needed within home or daycare settings. Weekly homework assignments facilitate practice of new skills and include both a child-focused component and parent-focused component.

Child Participation

Children do not participate directly in the group parent training. With home visits, interactions between caregivers and children are observed, and feedback is offered. However, all homework activities are designed to improve interactions between parents and/or professional caregivers and their children.

Progress Monitoring Tools

Throughout the sessions, participants complete homework and progress monitoring activities which allow the trainer to determine the level of understanding they have achieved for skills presented in the previous lesson. These assignments also allow the trainer to provide individualized feedback on skills. The participants also complete a multiple choice test on the ideas central to HOT DOCS prior to attending and at the end of the last session to evaluate knowledge of content. Finally, the authors recommend that all participants complete a standardized behavior rating scale prior to beginning classes and after the final session.

Training Requirements/Cost

There are two options for becoming a HOT DOCS trainer. The first is to attend all sessions of a training as a participant, and then to co-teach an entire course with an experienced trainer. This route requires potential trainers to purchase the trainers manual which is included in the registration fee and participate in a group lead by a master HOT DOCS trainer. Another option is to have an experienced HOT DOCS trainer deliver an all-day Train-the-Trainers workshop which would allow all staff attending to begin delivering HOT DOCS to their clients. The cost for this is $1,500 plus the cost of travel and manuals for participants. For more information and prices go to http://health.usf.edu/medicine/pediatrics/child-dev-neuro/HOTDOCS.htm.

Materials

The materials for conducting HOT DOCS sessions include a trainer's manual which includes the training DVD, and a participant workbook ($30) for each adult participating in the group. Also, trainers must have some way of projecting the PowerPoint slides and videos used for teaching each session. In addition, the trainer should provide items for the "Special Play" activity which is assigned every week. These items include bubbles, books, crayons and coloring books, Play Doh, and balls, enough to give one to each participating family. A final item that participants receive is a laminated HOT DOCS chart which may be written on with a dry erase marker.

Empirical Support

Several published studies supporting the benefit of the HOT DOCS program make it a *Possibly Efficacious* treatment. Analyses indicate that parents perceived positive outcomes for themselves and their children after participating in the program regardless of caregivers' level of education and availability of social support, showed increases in child development knowledge and high levels of satisfaction with the program, and reductions in child behavior on standardized rating scales (Williams, 2007, 2009; Williams et al., 2010). The positive experience of participant fathers has been documented through focus group interviews which identified key strategies to increase male caregivers' participation in parent training (Salinas, Smith, & Armstrong, 2011). In addition, the HOT DOCS approach has been adapted for Hispanic caregivers and has been translated into Spanish (Agazzi et al., 2010). Results for a wait-list cohort study also showed improved behavioral functioning of the treatment group (Williams, Agazzi, & Armstrong, 2011). Lastly, implementation has been documented for its use with toddler feeding concerns (Childres, Shaffer-Hudkins, & Armstrong, in press; Curtiss et al., 2008) and for autism spectrum disorders.

Prevention Model Tier

HOT DOCS is considered to be a tier 2 prevention program since it is designed for caregivers of children who believe that their children exhibit high levels of challenging behavior and/or developmental delays and disabilities. The intervention may be provided in a group format, making it less expensive compared with programs that require individual attention for each parent and/or child. HOT DOCS may also be applied individually within a home setting, and thus adapts well to home-based early intervention (Curtiss et al., 2008).

Incredible Years

Distinguishing Features

Incredible Years Programs (IYP) can be distinguished from other parenting programs by the extensive use of videotape vignettes throughout all training series. IYP was developed by Carolyn Webster-Stratton in 1980 and has expanded from solely a parent training program into a set of programs addressing concerns by working with parents, teachers, and the children exhibiting noncompliant and aggressive behavior. The different subprograms can be separated by the age of the child (programs address concerns from birth to age 12) and areas of concern (some focus on school, others on home). The curriculum teaches skills to the participants through behaviorally based strategies that include video-taped vignettes, modeling, role-playing, group discussion, and homework.

Theoretical Grounding

IYP is grounded in the research on factors associated with early-onset of aggression and conduct problems and Albert Bandura's research on the impact of modeling to change behavior (Webster-Stratton & Reid, 2003). The overall approach for the training model is a social learning approach (Sampers, Anderson, Hartung, & Scambler, 2001).

Focus

The focus of the IYP is to increase the competencies of parents and teachers to use nonphysical discipline strategies in order to handle noncompliant and aggressive behavior and to promote appropriate child behavior.

Time Requirements

The time required to complete the different programs varies. The parenting programs can last from 13 to 28 weeks and sessions are usually held every week for 2 hours (Reid & Webster-Stratton, 2001).

Child Participation

Children do not participate in the intervention with their parents. However, IYP has a companion program for children called the Dina Dinosaur program which is available in classroom and small group format. More information on the child programs is available through the IYP website www.incredibleyears.com and in the "Child/Classroom" section in this chapter.

Progress Monitoring Tools

A number of tools are available on the IY website (www.incredibleyears.com) to track the progress of the child, parent, or teacher. Also included are a number of tools to assess the group leader's adherence to the training manual and the ratings of each session and the IY program overall.

Training Requirements/Cost

To maintain consistently high standards in how the training is delivered to parents, teachers, and children, the staff at IY require all group members to attend a 3-day

workshop before delivering the intervention. These workshops are offered at a variety of locations around the nation. The Seattle workshops typically cost around $400. For more information visit the IY website at www.incredibleyears.com. In addition, it is possible for trainers to receive certification to provide training (certified group leader) and to train other providers (certified mentor or certified trainer) through additional workshops and materials.

In addition to these costs, trainers must purchase the materials for each program they wish to use. Programs range in cost depending on the number ordered and type (some saving occurs with bundling), but costs begin at $995 and increase. Also available are additional DVDs with vignettes and training sessions for providers, and materials to supplement IY sessions.

Materials

Essential materials include the items in the program package along with some method of showing them to families (TV & DVD player or computer & projector). Also, each participant requires a book and/or workbook.

Empirical Support

Incredible Years has a widely established research base with many rigorous research studies indicating its effectiveness with a variety of populations. The parent intervention for 2–8-year-olds has met criteria for a *Well-Established* evidence-based intervention (Chambless & Hollon, 1998). Most research has focused on the parent intervention, with the exception of very limited literature being found on the more recently developed Babies & Toddlers programs. The parenting programs have been found to work with parents of children who have developmental delays (McIntyre, 2008), low-income and urban populations (Gross et al., 2003), and with racially and ethnically diverse parents (Reid, Webster-Stratton, & Beauchaine, 2002). The program has also been found to be effective when provided entirely on the computer with activities and handouts to be completed independently (Taylor et al., 2008).

Prevention Model Tier

IYP is a secondary or tier 2 prevention program, as activities target parents of children who may be at risk for disruptive and noncompliant behavior problems, but do not necessarily carry a diagnosis. The program is provided in a group format and teaches skills that are intended to improve child functioning.

Nurse-Family Partnership

Distinguishing Features

The Nurse-Family Partnership (NFP) is a program which begins working with first-time mothers identified during the prenatal period and continues the relationship through the child's second birthday. NFP can also be distinguished from other programs since it can only be implemented with trained, registered nurses as the home-visitors. The program was originally developed by Dr. David Olds in the late 1970s as a solution to preventing the multitude of negative outcomes for children growing up in urban environments. An initial focus was to prevent child abuse and neglect by providing support and knowledge to families. The focus has now expanded to improving multiple areas of a family's life (relationships, economic, health, etc.). The program is implemented in certain areas around the country by local agencies which provide home-visiting nurses with supervision and collect and analyze data regarding effectiveness of NFP locally and examine fidelity to the intervention plan.

Theoretical Grounding

NFP pulls from three primary theories within the developmental psychology literature. The first is Bandura's self-efficacy theory which holds that people are more likely to engage in a behavior if they believe they can successfully complete the behavior and a desired outcome will result. A second influence is Bronfenbrenner's ecological theory, a view that where families live and the relationships that a family has with other people influences how parents care for their children. NFP is also grounded in Bowlby's attachment theory in that NFP focuses on enhancing parents' sensitive and responsive parenting behaviors in order to strengthen a bond between parents and child and to improve the likelihood that children will grow up and establish healthy relationships with others.

Focus

The focus of NFP is to improve child development by (1) improving pregnancy outcomes for first-time mothers by exposing them to good preventive health practices and ensuring thorough prenatal care, (2) helping parents provide responsible and competent care, and (3) improving the home environment by helping parents become economically self-sufficient, plan future pregnancies, and continue their education or find work.

Time Requirements

The program typically works with families during their first trimester through the child's second birthday, lasting a total of 30 months. The visits are scheduled weekly

for the first month a mother is enrolled and then they occur bi-weekly until the child is born. After the child is born, visits occur weekly for the first 6 weeks and then occur bi-weekly until the child is 20 months old. The last four visits occur once a month until the child is 2 years of age.

Child Participation

Children participate in activities with the nurse during the visit.

Progress Monitoring Tools

Data is collected at each NFP visit and is entered into a national data-base for analysis. This is to ensure that the fidelity of NFP session is maintained at the same level as the clinical trials. These tools appear to be standard across all agencies, but none are readily available to the public.

Training Requirements/Cost

The program does require training for registered nurses prior to working with families. It is suggested that nurses have previous experience in maternal or child health, behavioral health nursing, pediatrics, or other related fields. The core NFP training is offered in both face-to-face and distance learning opportunities. Nurses also meet regularly with a supervisor at their local agency to review family progress and address any concerns within the nurse-mother relationship. In addition, a manual provides guidance for what topics to be covered in each home session with parents. The manual allows for some flexibility in providing services to families. No cost data were available from the program's website (www.nursefamilypartnership.org).

Materials

Once a nurse becomes employed by a local agency, all materials are provided. To find a local agency, visit the program's website at www.nursefamilypartnership.org.

Empirical Support

The NFP has received extensive research support over the last 30 years of implementation. It meets criteria for a *Well-Established* intervention program. Through three randomized controlled trials conducted with families of Hispanic, African-American, and Caucasian backgrounds in rural and urban communities, the program continues to generate positive outcomes (Kitzman et al., 1997; Olds,

Henderson, & Kitzman, 1994; Olds et al., 2002). Extensive follow-up on the participants who were in the trials has proven that the NFP improves outcomes for mothers in multiple domains (e.g., improved prenatal health, reduce economic dependence on federal aid, reduce substance abuse problems and arrests) and child development outcomes have also shown improvement in many areas as a result of the program (e.g., increased school readiness, fewer arrests at age 15, fewer child injuries, and reduced abuse of substances; Eckenrode et al., 2000, 2010; Kitzman et al., 2000, 2010; Olds et al., 1997, 1998, 2010; Olds, Kitzman, et al., 2004; Olds, Robinson, et al., 2004). The extensive research which has repeatedly shown positive outcomes has encouraged implementation in multiple states around the country.

Prevention Model Tier

The NFP is considered a secondary or tier 2 intervention since it provides services to a group of mothers who are at risk for having poor child outcomes due to poverty and not being experienced parents. The program is implemented for an extensive period of time with families but parents need only meet income requirements in order to qualify.

Parents as Teachers

Distinguishing Features

Parents as Teachers (PAT) can be distinguished from other parent training programs by the incorporation of multiple components including monthly in-home visits and parent group meetings, connecting parents to local resources, and yearly developmental screenings. Another defining feature is that the program is typically implemented as part of an agency's services to the community and not as a stand-alone curriculum. The program was developed in the 1970s in Missouri and was first implemented in 1981 to encourage family involvement in order to improve children's school readiness and school success. The program's goals have expanded to now also include (1) increasing parent knowledge of early childhood development and improving parenting practices, (2) providing early detection of developmental delay or health issues, and (3) preventing child abuse and neglect. The program is now implemented in all 50 states and in several countries.

Theoretical Grounding

PAT arose from the research literature which indicates that some children enter kindergarten already significantly behind their peers in terms of school readiness. By improving parenting practices early in the child's life, the program also focuses

on improving parent–child attachment, a central aspect of John Bowlby's attachment theory. In addition, meetings with families teach skills via modeling and coaching, a connection associated with Bandura's self-efficacy theory.

Focus

The focus of PAT is to promote school readiness by working with parents from birth through age 5. The program has been implemented with primarily low-income families and with special populations including children with special needs, homeless families, teen parents, and incarcerated parents.

Time Requirements

The overall program is meant to work with families for 5 or more years, although this can vary depending upon the ages of children an agency works with (i.e., can be implemented by a preschool and only work with families for 2–3 years). The number of in-home visits and group meetings per month can also vary (weekly-monthly).

Child Participation

Children are only formally included in the developmental screeners which occur once a year. However, the individual meetings between parents and leaders can involve working on particular parenting issues with the child in the home.

Progress Monitoring Tools

The PAT website has printable Program Evaluation Handbook which provides many tools necessary for a local agency to examine the effectiveness and impact of the PAT services. In addition, the Outcomes Measurement Tool Kit provides information on a variety of measures that may be used by an agency to examine child and parent outcomes in multiple domains, depending upon the goals of the agency.

Training Requirements/Cost

Training is required for the different programs and services provided. However, this can vary by location, and practitioners are encouraged to contact the agency they are interested in working for to determine next steps for training. The trainings offered on the Born to Learn program cost between $520 and $700 depending upon location and also require the purchase of a guide ($295). Some supplementary trainings cost less due to the reduced content or narrowed focus. To find out about trainings, visit the website at www.parentsasteachers.org and click on the PAT University link.

Materials

For implementation of the program, parent educators are required to have the guides for the particular program they are using. In addition, agencies wishing to implement the PAT program need to have office space for parent educators including secure storage for family files and toys for home visits, as well as a meeting space for families and a play area for children. The PAT website has many materials available for practitioners including finding a local agency that is using PAT and reading suggestions grouped by various topics of interest to those serving children and families birth to age 5. Also available on the website are free tips and information for parents to assist their child's development in early academic domains (www.parentsasteachers.org and click the Parents portal and *Parenting Tips* link).

Empirical Support

Research on the outcomes of the PAT program has been extensive. Over 24 studies have been conducted to evaluate different aspects of the program. Regarding changes in parents, after receiving the PAT program, parents are more knowledgeable about child development, have better parenting skills, engage in more early learning activities, and are more involved in their child's schooling (McGilly, 2000; Pfannenstiel & Seltzer, 1989; Zigler, Pfannenstiel, & Seitz, 2008). Children of parents who participated in PAT were healthier and had higher early academic skills than children whose parents were not exposed to PAT (Drotar & Hurwitz, 2005; Wagner & Spiker, 2001; Zigler et al., 2008). A limitation to this research literature is that no randomized controlled trials have been used to compare outcomes of the PAT program to other established interventions or to a control group. Therefore, PAT is considered a *Possibly Efficacious* treatment.

Prevention Model Tier

The PAT program is a secondary or tier 2 prevention program. The program is designed to provide services to families at risk for poor outcomes and requires more time and resources than a primary prevention program.

Parent/Child Programs: Tertiary Prevention

A review of tertiary prevention programs revealed four programs: *Helping the Noncompliant Child Parent Training Program, Lovaas Applied Behavior Analysis, Parent–child Interaction Therapy,* and *Trauma-Focused Cognitive-Behavioral Therapy*.

Helping the Noncompliant Child Parent Training Program

Distinguishing Features

Helping the Noncompliant Child (HNC) can be distinguished from other programs by the very scripted session layout and the less stringent training requirements and lower cost. The therapy is divided into two phases: (1) teaching parents *differential attention* skills such as attending to positive behavior and providing rewards for desired behaviors, and (2) teaching parents' skills ensuring child compliance with requests. Several programs have arose from the original parent training therapy, including ones designed for groups of parents and a text for parents to use as a self-study. However, the primary program is still set up as a therapist working with each individual family (McMahon & Forehand, 2003).

Theoretical Grounding

HNC is grounded in theories which emphasize that challenging behaviors are shaped and maintained through patterns of family interactions that are maladaptive and serve to reinforce coercive behaviors (Patterson, 1975). The program was developed out of the Hanf Model of Parent Training (Hanf, 1969, 1970). This model focuses on teaching parents the skills of attending, rewarding, ignoring, providing clear instructions, and using time out appropriately (McMahon & Forehand, 2003). The training program also utilizes teaching strategies found within social learning theory (Sampers et al., 2001).

Focus

HNC is focused on addressing noncompliant behavior by improving parenting skills through modeling and role-play. The program is set to work with families of children ages 3–8 years old. In particular, the program intends to (1) establish positive and prosocial interactions between parents and their child, (2) improve parent skills in attending to positive behaviors, providing clear instructions, and providing consistent consequences for poor behavior, and (3) increasing child prosocial behaviors and decreasing conduct problems (McMahon & Forehand, 2003). The manual describes how to adapt the program for specific populations including children with ADHD, children who have been abused or neglected, and children with developmental disabilities or medical concerns (Wells, 2003).

Time Requirements

The length of time required to complete the program varies since completion depends on caregivers' ability to perform specific skills. In general, the families will

require between 5 and 14 sessions that last 75–90 minutes each. Sessions should be scheduled twice per week to be the most effective. The sessions follow a very specific format (outlined in the manual) along with appropriate steps to teach each skill.

Child Participation

Children participate in sessions with their parents. The therapy room has a specific play area where the child will be most of the session, with parents practicing skills with their child while the therapist is present. The child is also informed about the parents' new skills throughout the program.

Progress Monitoring Tools

The primary text for this therapy contains all tools necessary to conduct sessions. At the beginning of each session, the therapist records the use of various skills taught during therapy on the Behavioral Coding System (BCS) for 5 minutes while the parent and child play. In addition, materials to conduct the initial interview, monitor parent progress, and gather gains in knowledge are included in the appendices of the text.

Training Requirements/Cost

Therapists are required to purchase the manual (*Helping the Noncompliant Child: Family-based Treatment for Oppositional Behavior*) and read it. It is available through multiple bookstores and costs approximately $60. The ISBN is 1-57230-612-2. In addition, a video tape that demonstrates intervention procedures and component parenting skills is available to assist with training. This video tape costs approximately $30 and is available from Rex Forehand at Child Focus, 17 Harbor Ridge Rd., South Burlington, VT 05403. There is also a leader's guide/manual for a 6 week parent class which can be obtained by contacting Nicholas Long at the Department of Pediatrics, UAMS/ACH, 800 Marshall Street, Little Rock, AR 72202.

Materials

Trainings can be completed in the home or in a clinic setting. The room should allow for a "play area" with toys that promote joint play and a second area with chairs for adults to sit and a chair placed further away for Time Out. The "play area" should not be near the door. Ideally, the session room would have a one-way mirror and the parent could have a "bug" in their ear for the therapist to guide them remotely, but this is not necessary. A supplemental book for parents that is a self-guided read and teaches similar skills is *Parenting the Strong-Willed Child: The*

Clinically Proven Five-Week Program for Parents of Two- to Six-Year-Olds. This text costs around $11 and can be found at most bookstores with the ISBN 978-0071383011.

Empirical Support

A long line of research supports the effectiveness of this program to increase compliance, decrease other problem behaviors, and improve parenting skills (McMahon & Forehand, 2003). When compared to other therapies (systems family therapy and STEP program), parents in the HNC groups had higher levels of positive and contingent attention and provided clearer instructions. Also, children in the HNC condition exhibited more compliance to adult requests and less disruptive behavior (Baum, Reyna McGlone, & Ollendick, 1986; Wells & Egan, 1988). While by and large the research supports the effectiveness of the program, there are some limitations to the research including the use of small samples that are predominately middle- or lower-middle class and of European American descent. However, HNC meets criteria for a *Well-Established* intervention program.

Prevention Model Tier

HNC is a tertiary or tier 3 prevention strategy when used with an individual family as this requires a large time commitment from the therapist. Although children do not require a formal diagnosis prior to treatment, to necessitate this level of care from a therapist, noncompliant behaviors must be a severe problem that has not been improved by previous interventions.

Lovaas Applied Behavior Analysis (Lovaas ABA)

Distinguishing Features

The Lovaas ABA model is a program designed for children with diagnoses that fall on the autism spectrum and can be implemented in two manners: clinic-based and consultation-based. Clinics are located in California, Indiana, New Jersey, and Pennsylvania. If a family is not located near a clinic, the family can enroll in the consultation-based track where a consultant will travel to a family to provide training and set up program goals. For the rest of this section, the consultation-based approach will be discussed. The Lovaas ABA program is unique in that parents assemble a team for their child of 3–5 individuals who in total will deliver approximately 35–40 hours of intervention per week. The intervention focuses on using shaping through task analysis-breaking down complex skills, teaching these

smaller skills to the child, and shaping the skills into the complex behavior desired. Children must meet specific criteria in order to be assigned a consultant to train the child's team. To find out if a family qualifies, visit the program's website (www.lovaas.com) and click on *Enrollment*.

Theoretical Grounding

As can be expected, the Lovaas ABA method relies extensively on behavioral methods to teach children skills. The program does not necessarily focus on the specific ASD diagnosis, but instead focuses on the specific developmental delays a child is experiencing.

Focus

The focus of the Lovaas ABA model is to improve a child's areas of developmental delay that results from having a diagnosis on the ASD spectrum. The program accepts children as young as 18 months up through 8 years old, depending upon their developmental level. On occasion, children who are older than 8 years may be considered for intervention.

Time Requirements

The Lovaas ABA model requires extensive time of the child, with 30 or more hours being devoted to one-on-one intervention each week. The program can be carried out for multiple years with a child, depending upon their level of need and rate of progress in the intervention.

Child Participation

Children participate in all therapy sessions with either their parents or with another therapist. The therapy sessions often take place in multiple settings to have children use new skills and increase generalization of skills to the new settings.

Progress Monitoring Tools

The consultant that comes to the home relies on norm-referenced tests, parent interviews, and other ongoing assessments to track a child's progress. However, these assessments will most likely vary depending upon the child's areas of need.

Training/Requirements/Cost

Training costs are not listed on the program website.

Materials

The manual for the original program is entitled *Teaching Developmentally Disabled Children: The ME Book* and it is currently out of print. However, copies can be purchased from independent sellers through Amazon.com at a range of costs ($32.00–$75.00). To search for the book, use the ISBN number 978-0936104782. A newer version (*Teaching Individuals with Developmental Delays: Basic Intervention Techniques;* ISBN-978-0890798898) is also available and can be purchased through the Lovaas Institute's website at www.lovaas.com. The cost is $86.65. In addition to the manual, multiple other materials will be needed but these will vary depending upon the child one is working with and their particular needs.

Empirical Support

The Lovaas ABA method has 40 years of research to support aspects of the program. It meets criteria for a *Well-Established* intervention program. However, only two research studies will be reviewed as these were determined to meet rigorous research standards. The first study was conducted by Smith, Groen, and Wynn (2000). This study compared the Lovaas ABA method that carried out 30 or more hours per week for 2–3 years (15 parents) to an intense parent training condition where parents were taught the same approaches to use with their child in 5 hours a week for 3–9 months (13 parents). Results showed that at follow-up, children in the Lovaas ABA condition outperformed children in the parent training group on measures of intelligence, language, and academics, but not on adaptive functioning or behavior problems.

The second study (Sallows & Graupner, 2005) also compared a clinical Lovaas ABA condition to a parent condition with 13 children in the Lovaas condition and 10 children in the parent-directed condition. However, this time the parent-directed condition was modeled after the consultation approach currently used (parent leads a team of professionals who intervene with the child with minimal supervision). Interventions were carried out for 4 years and results showed that both conditions had positive outcomes for children in terms of increases in IQ scores, adaptive behavior, receptive language, and socialization. While these findings are promising, they do not represent replications by an independent research team and should be interpreted with caution.

Prevention Model Tier

The intense amount of time required to implement the Lovaas ABA model places this model into the third tier of prevention. Children typically have a diagnosis at the time they qualify for receiving a consultant.

Parent–Child Interaction Therapy

Distinguishing Features

Parent–Child Interaction Therapy (PCIT) can be distinguished from other parenting programs by the direct coaching parents receive and the performance-based termination. Parents receive direct coaching from the therapist during play with their child within the session. Also, therapy length can vary because therapists and parents agree on ending only when the parent is competent and confident enough to use the techniques taught on their own. The therapy is divided into two phases that address: (1) the parent–child attachment style, and (2) the skills of the parent in using authoritative parenting practices.

Theoretical Grounding

PCIT has developed out of Baumrind's (1967, 1991) developmental theory, which links child outcomes with various parenting styles (a more thorough review appears in Chap. 2 of this manual). A primary focus of PCIT is to assist parents with practicing authoritative parenting, a parenting style that results in positive outcomes for children. A second theoretical base for PCIT is attachment theory, with a focus on developing secure attachments between children and their parents. Finally, the techniques taught to parents within PCIT to manage behavior are drawn from social learning theory. By providing reinforcement for desired behaviors and removing reinforcement for aggressive or noncompliant behaviors in a consistent way, children's behavior will improve.

Focus

The focus of PCIT is on improving the parent–child attachment relationship and to improve the behavior management skills of the parent. Children are typically within the ages of 3–6 years old, although the program has been used with both younger and older children who exhibit disruptive behavior problems. Many of the children who benefit from this program have diagnoses of Oppositional-Defiant Disorder (ODD) or Conduct Disorder (CD) with comorbid Attention-Deficit/Hyperactivity Disorder (ADHD). PCIT has also been documented for use in cases where parents have been reported to state agencies for physical abuse.

Time Requirements

Sessions are planned to be approximately 1 hour long. A key component is that when teaching time out procedures for the first time during session, the session must be long enough so that the child eventually complies with the command. Also, the

length of treatment can vary from 8 sessions to 20+ sessions depending on the severity of the behaviors and the parent's confidence with using the new skills and techniques. However, on average, completion takes about 15 sessions.

Child Participation

Children participate in sessions with their parent and the therapist.

Progress Monitoring Tools

Therapists keep track of how many times the parent uses the different skills taught within PCIT during the initial 5 minutes of the therapy session when the child and parent play together. This is coded on the Dyadic Parent–child Interaction Coding System (DPICS). Additionally, the Eyberg Child Behavior Inventory (ECBI)-Intensity scale is often completed prior to each session. This can yield criteria for completion, as termination is *not* recommended unless a raw score below 114 is obtained. Many of these tools are available from the website http://pcit.phhp.ufl.edu/ along with training information.

Training Requirements/Cost

Clinicians must have master's degree or higher in a mental health field and must be licensed in their field or receive supervision from a licensed individual trained in PCIT. Clinicians who meet requirements then complete a 40 hour face-to-face contact with a PCIT trainer. This most often occurs in a week-long workshop that costs $3,000. In addition to this, within 2–6 months of the initial training, an advanced live training occurs with real cases. This includes a minimum of two completed PCIT cases and maintaining regular contact with a PCIT trainer (via telephone, live observation, or tape review). Finally, skills must be reviewed by a PCIT trainer via videotapes, live observation, or online methods. This is the minimal level of training; clinicians can opt to attend further training and become a "Master Trainer" which allows them to provide training to other clinicians outside of the agency where they work.

Materials

Ideally, the sessions will take place in a room with a one-way mirror and the parent will have a device in their ear so the therapist can communicate with them. However, if this set up is not available, the therapist can sit in the corner of the room and coach the parent in a soft voice. Required materials include a chair and a room that can be used for the time out procedure along with toys and other activities for the parent

and child to play together. Finally, the materials provided during the formal training include the PCIT manual to guide treatment.

Empirical Support

PCIT has a large research base indicating its effectiveness. Three rigorous trials have resulted in PCIT being named as a *Well Established* treatment for children ages 3–6 years old with disruptive behavior disorders (Bagner & Eyberg, 2007; Nixon, Sweeny, Erickson, & Touyz, 2003; Schuhmann, Foote, Eyberg, Boggs, & Algina, 1998). However, most of the participants within the study have been of European American descent (Brinkmeyer & Eyberg, 2003). More recent research has come out regarding the use with diverse groups and found a higher drop-out rate for African-American families, but treatment gains for completers were equivalent to or higher than other populations (Fernandez, Butler, & Eyberg, 2009).

A final area of research has been the use of PCIT with families with abusive behavior. Chaffin et al. (2004) found that parents who underwent PCIT were significantly less likely to have an additional report of abuse filed up to 3 years after ending PCIT sessions.

Prevention Model Tier

PCIT is considered a tier 3 prevention program. While a diagnosis of ODD, CD, or ADHD is not required, the children this intervention is typically used with do have these diagnoses. PCIT is very individualized and intensive. It is primarily conducted in individual sessions, requiring a large amount of time from the therapist.

Trauma-Focused Cognitive Behavior Therapy

Distinguishing Features

Trauma-Focused Cognitive Behavior Therapy (TF-CBT) is a program developed to assist young children and their families who have been through some type of traumatic event. TF-CBT works with both the child and the parent(s) in primarily separate sessions to process the trauma and create what is known as a "trauma narrative." The trauma narrative describes the trauma in detail to create a realistic representation of the event. Practitioners should note that this is one of the only evidence-based programs for young children who have experienced some type of abuse or trauma. In addition to this program, a cognitive-behavioral therapy for traumatic grief (TG-CBT) is available for older children (ages 6–17; Cohen, Mannarino, & Deblinger, 2006).

Theoretical Grounding

Several theories are evident in examining TF-CBT's programming. The program has both cognitive and behavioral components to assist children and their families in coping with the trauma. In addition, an ecological approach is taken that incorporates the entire family into the therapy process.

Focus

TF-CBT can be used with children ages 3–17 years old who are experiencing Post-Traumatic Stress Disorder (PTSD) or have subclinical levels of PTSD but are evidencing other difficulties in readjusting (e.g., behavioral problems, depression) after experiencing trauma or abuse. The program focuses on reducing the symptoms associated with PTSD such as reexperiencing events or remaining in a heightened arousal state. The program also seeks to increase the use of healthy coping mechanisms to handle stressors.

Time Requirements

TF-CBT is set up to be completed with the child in 12–18 sessions, with mostly separate sessions being attended by the parent. Sessions can last from 30 to 60 minutes depending upon the child's age and ability to participate with the therapist.

Child Participation

Children participate in their own separate sessions with the therapist to create the trauma narrative and process the trauma. In the parent sessions, parents are prepared to listen to the narrative and taught strategies similar to the child to reinforce use of these skills at home.

Progress Monitoring Tools

While no specific progress monitoring tools are detailed in the manual, studies of TF-CBT often track the effectiveness of therapy through use measures assessing PTSD, anxiety, and depression that are available to practitioners and specific to child ages.

Training Requirements/Cost

Training for TF-CBT is available online for free through the National Child Traumatic Stress Network and several other agencies at http://tfcbt.musc.edu/.

Practitioners who have a Master's degree or higher within a mental health discipline can register for the online training and are allowed to use TF-CBT after completing training and reading the manual.

Materials

In addition to the online training, therapists should purchase and read through the TF-CBT manual, *Treating Trauma and Traumatic Grief in Children and Adolescents,* which is available for purchase at most online bookstores for approximately $40.00. The ISBN number is 978-1-59385-308-2. In addition to the manual, practitioners should provide multiple art supplies to allow children options for creating their trauma narrative.

Empirical Support

TF-CBT has been investigated in multiple clinical trials, all with positive results. This has helped it meet criteria for a *Well-Established* therapy. The program has been honed through research to have the most impact through a combination of parent and child meetings, and to be conducted in as few as 12 sessions (Cohen et al., 2006). Children as young as 3 who have completed TF-CBT with their parents have been shown to exhibit reduced symptoms of PTSD, depression, behavior problems, and shame (Cohen, Deblinger, Mannarino, & Steer, 2004; Cohen & Mannarino, 1996, 1997; Deblinger, Lippman, & Steer, 1996). Parents who have completed TF-CBT report improvement in parental depression, distress related to the abuse, the use of positive parenting practices, and support of the child (Cohen et al., 2004; Cohen, Mannarino, & Knudsen, 2005).

Prevention Model Tier

Since TF-CBT is individualized and commonly conducted only with children and families who meet diagnostic criteria for PTSD, it is considered a tertiary level of intervention. The intervention works very intensely with family members to address trauma and/or grief.

Multi-tier Programs

There was one program that was best characterized as a multi-tier program, meaning that the goals of the intervention fit with multiple levels of prevention. This program is the Triple P program.

Triple P-Positive Parenting Program

Distinguishing Features

The Positive Parenting Program (Triple P) can be distinguished from other parenting programs by the comprehensive model put in place to deliver services to families with varying levels of need. The program's activities with families are divided among five levels which increase in intensity to meet the needs of families. Triple P's multiple formats can be implemented in different settings including the home, workplace, and clinics. The use of telephone consultation in several of the service delivery methods distinguishes Triple P from other parent training programs, allowing practitioners to reach families that live in rural areas or regions far from providers. It provides services for children from infancy to adolescence. The program was developed by Dr. Matthew R. Sanders at the University of Queensland, Australia, but the success of the program has resulted in adoption in multiple countries including the United States, Canada, and Germany.

Theoretical Grounding

Triple P draws from several theories to inform the multiple levels of service delivery. A primary method of changing behavior, Triple P draws from social learning theory and incorporates methods consistent with this theory to teach parents positive parenting strategies. An additional theory that Triple P is based on is the ecological model, and Triple P emphasizes that in order to impact problems, multiple domains where the problem occurs must be targeted. The program also pulls from research on family behavioral therapy which provides strategies to increase positive child behavior and decreasing the likelihood of problem behavior occurring. Triple P is also informed by research on development, including which factors are related to the development of challenging behaviors and psychopathology in children (Sanders, Cann, & Markie-Dadds, 2003).

Focus

The focus of Triple P is to provide services which promote the development of families that are independent and healthy. The program accomplishes this through promoting five parenting skills: (1) ensuring a safe and engaging environment, (2) creating a positive learning environment, (3) using assertive discipline, (4) having realistic expectations, and (5) ensuring parents take time to care for themselves (Sanders et al, 2003). In addition, families that are experiencing distress receive focused services on their respective needs (e.g., anger management, mental health concerns, marital discord).

Time Requirements

Time requirements to complete the intervention depend upon the level of intensity the intervention is delivered at. However, most sessions where a practitioner meets with parent(s) last from 1 to 2 hours. Within the program there are no more than 12 sessions with a family or groups of parents.

Child Participation

Depending upon which program within Triple P is used, children may or may not participate. In general, the programs within the higher levels of Triple-P (Levels 4 & 5) incorporate involvement of the child during the home visit or have parents practice newly learned skills with their children.

Progress Monitoring Tools

No measures are listed as progress monitoring tools on the program's website.

Training Requirements/Cost

To become a Triple P provider, practitioners must have a postsecondary degree in the fields of Health, Education, or Social Services and also attend Triple P training. The training is offered in two different formats: for individual practitioners and for organizations. For practitioners, Triple P training is held in Columbia, SC once a year and further information on dates and costs are available on the program's website (www.triplep-america.com). The cost for training varies between $1,450 and $1,905 and includes Triple P resources for the particular level a practitioner is trained on. Prior to registering, practitioners should check to make sure they meet prerequisites for their training, as some training sessions are sequenced.

If organizations want to adopt the Triple P system, training is available for all levels above the universal level (Levels 2–5) for up to 20 practitioners at one time. To find out more information about training in Triple P, email contact.us@triplep.net to request a quote. Included in the pricing for organizations is training, accreditation, training materials, practitioner manuals, and access to the web-based Triple P Provider Network with further information and resources.

Materials

Initial materials are included with the training. Additional materials are available by requesting a Practitioner Order Form from contact.us@triplep.net.

Empirical Support

Triple P has gathered empirical support for over 30 years of the program's implementation. Over 20 studies have documented a variety of positive outcomes (e.g., decreased problematic behavior, increased parent competence) for use with young children and preschool populations, helping this program acquire the status as *Possibly Efficacious.* Multiple studies have documented effectiveness with older populations. Therefore, a thorough review of the empirical support of Triple P is beyond the scope of this text. However, several consistent findings will be reported. The media campaign that composes the first level of services was investigated with 56 families (with 28 families watching the television series and 28 on a wait-list), and found that the families who watched the series reported lower levels of child behavior problems, higher levels of parenting competence, and rated this method of intervention delivery as very acceptable (Sanders, Montgomery, & Brechman-Toussaint, 2000). Regarding the delivery of parent training, in general, parents who completed any form of Triple P (self-directed, standard, workplace, or enhanced) reported reductions in: (1) child behavior problems, (2) parent mental health problems, and (3) parenting stress. Parents also reported higher levels of parent competence and more frequent use of positive parenting practices (Bor, Sanders, & Markie-Dadds, 2002; Connell, Sanders, & Markie-Dadds, 1997; Ireland, Sanders, & Markie-Dadds, 2003; Markie-Dadds & Sanders, 2006a, 2006b; Martin & Sanders, 2003; Roberts, Mazzucchelli, Studman, & Sanders, 2006; Sanders, Markie-Dadds, Tully, & Bor, 2000; Sanders et al., 2004; Turner & Sanders, 2006; Zubrick et al., 2005). Using Triple P has also been found effective in reducing marital/relationship discord in families (Dadds, Sanders, Behrens, & James, 1987; Ireland et al., 2003; Sanders et al., 2004), reducing feeding problems in young children (Turner, Sanders, & Wall, 1994), reaching and improving the lives of rural families (Connell et al., 1997; Dadds et al., 1987; Markie-Dadds & Sanders, 2006a, 2006b), and working with families where children are exhibiting behavior problems in combination with attention issues or developmental delays (Bor et al., 2002; Roberts et al., 2006).

Prevention Model Tier

Triple P has intervention services that cover all tiers of prevention. The program's Media Campaign (Level 1) provides information to all families, covering the primary prevention tier. The less intense parenting interventions (Levels 2, 3, and 4) consist of between 1 and 12 hours of instruction, provide information, and teach parents skills to handle moderately challenging behavior and to prevent further escalation of behavior problems. These elements would belong in the secondary level of prevention. Finally, the top level of services within Triple P (Level 5) provides intensive individualized services to families that have severe levels of child behavior problems coupled with other family issues. This level of service delivery falls into the tertiary level of prevention due to the severity of problems and the intervention's high demands for time placed on families and therapists.

Child/Classroom Programs

Commonalities Among Child/Classroom Programs

Before reviewing each of the child/classroom programs, it is helpful to recognize some of the commonalities among all of the programs which have a specific focus of improving outcomes for children. The child programs are delivered primarily through full-classroom instruction. However, a small subset of programs schedule meetings with small groups of children rather than the entire classroom. Much like the parent/child programs, most of the child/classroom programs employ a learning theory approach to teaching replacement skills. Other prominent theories utilized in these programs include Bandura's theory on the impact of modeling, Bronfenbrenner's ecological theory, and cognitive and developmental theories.

The programs that are reviewed have several common themes among them including (a) teaching children to identify emotions, (b) teaching prosocial skills related to self-control, (c) teaching children to problem solve, and (d) reducing problematic or aggressive behavior though behavior management. Additional areas programs focused on include promoting child resiliency and academic competencies.

The following programs are suitable for supporting children in prekindergarten or kindergarten settings according to EBP standards. While only four of these approaches have been documented for use with children under age 3, the description of these programs will help practitioners and parents determine which approaches might be most suitable for their child as they enter preschool age. As with the overview of parent/child approaches, information about training costs and materials is included to assist providers/funders in decision making. Table 5.3 below can serve as a broad overview of child/classroom programs reviewed in this chapter.

Child/Classroom Programs: Primary Prevention

Four child/classroom programs are at the primary level of prevention, meaning that the strategies are designed to assist all children. The programs within this section include: *Promoting Alternative Thinking Strategies, Second Step, Social Skills in Pictures, Stories, and Songs,* and *Tools of the Mind.*

Promoting Alternative Thinking Strategies (PATHS)

Distinguishing Features

The PATHS preschool program is a downward extension of a program that has proven effective in building social and emotional competence in older children. The

Table 5.3 Summary of child/classroom programs using PICO process

	Population	Intervention	Comparison	Outcome
Primary prevention program				
Promoting Alternative Thinking Strategies-Preschool Version	4–6 years	Classroom-wide affective education program	Possibly efficacious	Improved parent and teacher ratings of social and emotional competencies
Second Step	4–6 years old	Classroom-wide violence prevention program	Possibly efficacious	Improved ratings for social skills and disruptive behavior
Social Skills in Pictures, Stories, and Songs Program	3–5 years old	Classroom-wide adaptive skill building program	Possibly efficacious	Increased demonstration of social skills
Tools of the Mind	4–6 years old	Classroom-wide self-regulation and independence	Possibly efficacious	Improved ratings for behavior and self-regulation
Secondary prevention programs				
Al's Pals	3–8 years	Classroom-wide/small group resiliency and reduction of violence	Possibly efficacious	Reduced ratings for disruptive behavior and increased social skills
Devereux Early Childhood Assessment Program	2–6 years	Classroom-wide and parent training to develop child strengths	Possibly efficacious	Improvement in ratings for protective factors
I Can Problem Solve/ Interpersonal Problem Solving	4–5 years	Classroom-wide/small group affective and problem solving	Possibly efficacious	Lower ratings for problem behavior and increased problem solving
Incredible Years Dina Dinosaur Training	4–8 years	Classroom-wide/small group to promote self-control and compliance	Possibly efficacious	Improved ratings on child behavior measures when used with Incredible Years parent training program
Tertiary prevention programs				
Early Start Denver Model	12–60 months, with ASD	Intensive intervention including interventionists and parents	Possibly efficacious	Reduction in autism symptoms
First Steps to Success	4–5 years old	Screening with classroom and parent training	Possibly efficacious	Improved ratings on child behavior measures
Learning Experiences and Alternative Programs for Preschoolers and their Parents	12–72 months, with ASD	Individual and classroom-wide peer and adult-mediated strategies	Possibly efficacious	Reduction in autism symptoms, improvement in IQ and language

program can easily be integrated into the preschool curriculum. The authors note that PATHS extends previous work on social-emotional curricula by "including instruction in multiple skill domains that is delivered in a developmentally appropriate sequence" (p. 70; Domitrovich, Cortes, & Greenberg, 2007). The program includes activities throughout the curriculum to teach specific skills such as emotion labeling, complimenting, coping skills, communication skills, and problem solving.

Theoretical Grounding

The PATHS curriculum is grounded in Affective-Behavioral-Cognitive Dynamic model of development (Greenberg, Kusché, & Speltz, 1991) which explains the link of how affect, behavior, and cognitive understanding integrate to develop social and emotional competence. An additional theory that has influenced the program is Bronfenbrenner's ecological theory, with a primary focus in PATHS being the creation of environments that promote the use and generalization of new skills to other areas.

Focus

The primary goals of PATHS are to: (1) develop awareness and skills to communicate one's own emotions and the emotions of others, (2) teach self-control skills, (3) promote prosocial skills and positive self-concept, (4) build problem-solving abilities, and (5) create a positive classroom environment with structure that supports social and emotional learning.

Time Requirements

The PATHS program represents a year-round curriculum to be implemented in schools. The manual has 44 lesson plans that are divided into nine units to be covered over the course of a school year.

Parent Participation

No specific parent participation activities/strategies were mentioned on the website or in the seminal article on the preschool curriculum (Domitrovich et al., 2007).

Progress Monitoring Tools

The website (http://www.channing-bete.com/prevention-programs/paths/paths.html) provides a basic progress monitoring tool that allows teachers to rate changes

in a child based on 31 different behaviors at the beginning and end of the school year (before and after the intervention). Also included for free are measures assessing the integrity and quality of lesson delivery and teacher satisfaction with PATHS. In addition, other measures can be included to assess specific behaviors or track a specific child's progress while receiving the PATHS curriculum.

Training

Training is conducted by certified, experienced trainers in a workshop format. For information on PATHS Preschool training costs, dates, and locations, select training workshops from the website.

Materials

The cost to implement the program is $479 per classroom. This price includes the teacher's manual, two curriculum manuals, storybooks for children, posters to display around the room, flashcards, and numerous other components related to the program.

Empirical Support

The PATHS preschool program has extensive research behind the elementary-age model and well-conducted research on the preschool model. In a randomized controlled trial of 246 children enrolled in Head Start classrooms, children who were in the PATHS Preschool program scored significantly higher than other children on measures of emotional and social competence. These differences were also observed by parents and teachers. Parents of children within the PATHS classrooms rated their children as more socially competent compared to peers and teachers rated children as more socially competent and less withdrawn than children who did not receive the PATHS curriculum (Domitrovich et al., 2007). This study along with the research support for the PATHS model has prompted the Substance Abuse and Mental Health Services Administration (SAMHSA) to add PATHS to the National Registry of Evidence-Based Programs and Practices. However, PATHS still requires additional replication research. Therefore, it is considered a *Possibly Efficacious* program.

Prevention Model Tier

The PATHS curriculum is considered a tier 1 prevention strategy as the program is delivered to all children within a classroom and the primary goals of the program are to promote social competence and thereby reduce problematic behaviors. The

program can be incorporated into other curricula, increasing ease of use. Despite the long period of time the intervention is delivered (one school year), only 44 lessons are to be delivered, resulting in the time and resources needed to implement remaining relatively low.

Second Step

Distinguishing Features

Second Step is a curriculum that has different levels designed to be delivered to children from preschool through middle school. This section will focus on the Preschool/Kindergarten level. The program is under the ownership of the Committee for Children and has extensive research over the past few years to support its effectiveness.

Theoretical Grounding

Second Step is grounded in learning theory with regard to how skills are conveyed to students. Children are taught to observe and model prosocial behaviors and receive feedback and reinforcement for practicing new skills.

Focus

Second Step was developed as a violence prevention program. However, the primary focus is the reduction of problematic behavior by teaching children skills in empathy, emotion management, and problem solving. The level for preschool/kindergarten is designed for children ages 4–6 years old.

Time Requirements

Second Step for preschool has 25 lessons that are delivered twice a week for approximately 30 minutes. The program is spread across several weeks of the school year.

Parent Participation

Parents are informed of lesson content and are invited to watch a lesson through letters that are sent home. The letters also contain specific activities and strategies parents can use to encourage these skills at home and reminders to reinforce children for using new skills. In addition to these letters, a family guide is available in

English and Spanish and directs parents through six sessions consisting of videos and discussions. Take home handouts are included.

Progress Monitoring Tools

A number of assessment tools are available to progress monitor students and evaluate classroom implementation. These tools are included in the kit.

Training

Staff training is highly recommended prior to implementing Second Step. Training typically consists of 2 full-day workshops costing $525 per person. This cost includes a Trainer's Manual, staff training DVD's, and a training CD-ROM, but does not include the Second Step Kit. Information regarding trainings can be found at the Second Step website (www.cfchildren.org).

Materials

The cost of a preschool/kindergarten Second Step kit is $289.00. The kit includes all the lesson cards, teacher's guide, administrator's guide, three classroom posters, two puppets, a CD of songs, and a DVD for families to provide an overview. In addition, a supplementary pack is available for providing the lessons in Spanish for $69.00. All materials can be ordered through the Committee for Children's website (www.cfchildren.org).

Empirical Support

Two studies have examined Second Step preschool/kindergarten (McMahon, Washburn, Felix, Yakin, & Childrey, 2000; Moore & Beland, 1992). However, only one study could be obtained (McMahon et al., 2000). Fifty-six preschool children (from primarily African-American and Latino backgrounds) participated in Second Step. The results of a pre-test/post-test comparison revealed that the children had increases in their knowledge of social skills and decreases in observed aggressive and disruptive behavior. Further research is needed to support the program and examine the effectiveness of the parent component, thus it is considered *Possibly Efficacious.*

Prevention Model Tier

Second Step is a primary prevention program because it is delivered to all children and focuses on promoting behaviors inconsistent with problem behaviors.

Social Skills in Pictures, Stories, and Songs Program

Distinguishing Features

The Social Skills in Pictures, Stories and Songs Program (SSPSSP) can be distinguished from others by the use of a self-determination approach as a method of increasing adaptive skills and decreasing problem behavior. The program originated under the name "Living with a Purpose." SSPSSP is intended to be implemented as a component of a preschool curriculum. The premise behind SSPSSP is that providing children with the ability to have input into decisions that affect their lives will lead them to be more resilient. The skills are taught through stories and coloring books and children are given the opportunity to act out skills and receive feedback.

Theoretical Grounding

The SSPSSP is grounded in learning theory with regard to how skills are presented to children. Children are taught to observe and model particular behaviors and receive feedback and reinforcement for practicing new skills.

Focus

SSPSSP focuses on four adaptive skill areas: (1) following directions, (2) sharing, (3) managing one's behavior, and (4) problem solving. It can be delivered in English and Spanish and is intended for children between the ages of 3 and 5 years old.

Time Requirements

The SSPSSP program is carried out over 12 weeks by having two 3-hour sessions each week within the classroom.

Parent Participation

No specific parent involvement strategies are included.

Progress Monitoring Tools

No tools are included in the materials and none were mentioned on the website which the program could be ordered through (www.researchpress.com).

Training

In the research that has been conducted, teachers observed a Master Teacher for at least 3 months prior to implementation and received a manual. Training can be provided to teachers by request, and costs will vary depending upon the needs of the teachers (L. Serna, personal communication, August 10, 2010). To schedule training, contact Loretta Serna, Ph.D., at rett@unm.edu or 505-277-0119.

Materials

The materials are available for purchase through www.researchpress.com. The cost for the complete kit is approximately $150.00 and an additional ten sets of coloring books are available for $50.00.

Empirical Support

Three trials of the SSPSSP have been conducted comparing classrooms that received the intervention and classrooms that did not (control). The results of the first trial were quite impressive, with teacher ratings of the SSPSSP classrooms improving after the intervention (Serna, Nielsen, Lambros, & Forness, 2000). In addition, children who exhibited significant emotional and behavioral problems prior to the SSPSSP either improved or were no worse after the intervention. However, similar children in the control classrooms either became worse or demonstrated symptoms of new emotional and/or behavioral disorders (Serna et al., 2000). A limitation to this trial was that the teachers implementing the intervention were highly trained.

The second trial had typical teachers implement the SSPSSP curriculum within Head Start classrooms. Differences between the SSPSSP and control groups were much smaller, indicating lesser effects of the intervention and possible issues related to measurement error (Serna, Nielsen, Mattern, & Forness, 2003). In the third trial, the methods from the second study were repeated, but structured observations focusing on measuring the specific skills taught in the program were also included. This third replication had similar findings to the second regarding small differences between groups on ratings of emotional and behavioral symptoms, but did find that children who received the SSPSSP intervention increased their use of the SSPSSP skills from 20–40 % to 90–100 % (Serna, Forness, & Mattern, 2002).

Several limitations should be noted within the replication studies and be considered prior to implementing this program, including: (1) lack of independent replications, (2) the program has only been studied with children attending Head Start, and (3) in all studies, raters and observers were aware of whether or not the children were receiving the intervention. Due to these limitations, SSPSSP meets criteria as a *Possibly Efficacious* treatment.

Prevention Model Tier

SSPSSP is a primary prevention program because it is delivered to all children and focuses on promoting behaviors that will lead to resilient children.

Tools of the Mind

Distinguishing Features

Tools of the Mind (TM) is a preschool classroom curriculum that focuses on preparing children for elementary school by developing self-regulation skills. The program makes use of play throughout the classroom day to develop specific skills in language, rule-learning and ability to follow rules, interaction with peers and adults, and to develop specific skills associated with self-regulation. The core of TM is 40 strategies that promote the development of self-regulation, and the use of these strategies composes 80 % of a child's day (Diamond, Barnett, Thomas, & Munro, 2007). The program began as a collaboration between Drs. Elena Bodrova and Deborah Leong and has been implemented in Colorado, Florida, Maine, Massachusetts, New Jersey, New Mexico, North Carolina, Oregon, Pennsylvania, Tennessee, Texas, and Washington. TM has also been adapted for use within a kindergarten classroom and to accommodate the special needs of children with disabilities or developmental delays so that these children can remain integrated in the regular classroom.

Theoretical Grounding

The TM program is grounded in Vygotskian theory of child development and relies heavily on the concepts of scaffolding and zone of proximal development (Barnett et al., 2008). Teachers use specific strategies within the classroom to scaffold a child's learning. This involves providing a lot of assistance as a skill is initially learned and gradually removing that assistance as the child becomes able to perform the skill independently. The zone of proximal development refers to the gap that occurs between what a child can accomplish independently and what level of performance can be achieved with assistance from another person.

Focus

The focus of TM is primarily on the development of self-regulation through play. By developing self-regulation skills, children within the classroom should be able to learn more easily because they can direct their own attention and ignore distractions, reflect on their thinking, remember better, and engage in more prosocial behaviors with peers and adults (Leong, 2009). The program also emphasizes critical early learning skills in the areas of literacy, numeracy, science, and writing.

Time Requirements

Tools of the Mind is used throughout a school year and can be implemented in half-day and full-day preschool settings.

Parent Participation

No specific activities are mentioned involving parents within the program description or research literature.

Progress Monitoring Tools

No specific tools are mentioned to monitor child progress. However, one of the program developers indicates that the progress of children and the class as a whole is monitored, daily, weekly, and monthly (Leong, 2009). The program also has fidelity checklists available for program coaches or administrators to use to monitor how well the TM curriculum is being implemented.

Training

Training in TM is conducted as part of a regimented 2-year implementation plan. To begin implementation, a team must be created within the district that is composed of at least teachers, assistant teachers/paraprofessionals who will be implementing TM, administrators of the preschools, and a site coordinator or coach for the district. During the first year, the curriculum is divided into four phases and coaches and other team members attend four workshops that correspond with these phases. Also during this year, the preschools receive four on-site visits by TM trainers to ensure that the newly acquired skills are being implemented correctly. The first year of training covers: development of self-regulation through play, management of the classroom, planning and developing rich play themes for use within the classroom, and activities to teach literacy, math, and science skills. Special education staff can also receive training on the Response to Intervention (RtI) model. The second year of training for preschool settings focuses on: individualization of activities, accommodating children with special needs, and assessment of child learning. The content and number of workshops is negotiated with TM staff to meet the ongoing needs of the district.

Costs of training are based on a per classroom price for a district and can be determined by contacting the person below (Leong) responsible for the region in which the program will be implemented. Leong (2009) indicated that the average cost of first year training during 2008 was $2,000–$3,000 per classroom and the cost of second year training was typically around half of the first year. This training cost does not include training for special education staff, which is contracted on a per person basis. For more information on training, contact Training@ToolsoftheMind.org.

Materials

The TM program utilizes materials that are commonly used within a preschool classroom as well as some tools that are TM-specific. Typical TM classrooms include at least one teacher and an assistant teacher or paraprofessional within each classroom, but this may vary depending on the class size. The staff at the TM primary office can assist districts that wish to implement TM by suggesting modifications, adaptations, and additions to current materials the district possesses. The staff can be contacted through the program's website (www.toolsofthemind.org) to determine needed materials and relative costs of implementation.

Empirical Support

The TM program is supported by 15 years of research in kindergartens and preschools; however, randomized trials have only been published more recently. A randomized trial of 21 classrooms compared the TM curriculum with a Balanced Literacy curriculum that covered similar academic content, but did not emphasize self-regulation. Children who were in TM classrooms performed better on self-regulation tasks than children in the other classroom condition (Diamond et al., 2007). While these results are strong, they do not provide information about differences in academic achievement, which is an important outcome.

A second randomized trial took place in New Jersey and again evaluated the differences between TM and a curriculum that covered the same academic content but reflected the school district's traditional instructional delivery. A total of 7 classrooms implemented the TM curriculum and 11 classrooms offered the "traditional" instruction. Results indicated that the TM curriculum was significantly better at improving classroom behavior and children's self-regulation skills. However, early academic outcomes did not show significant differences between conditions (Barnett et al., 2008). With this research, TM meets criteria for a *Possibly Efficacious* program.

Prevention Model Tier

The TM program should be considered a tier 1 level of prevention since it is delivered to all children within the classroom. The program focuses on preventing behavior problems in all children by developing aspects of self-regulation, skills documented to improve multiple outcomes for children.

Primary or Secondary Prevention Programs

Four programs were found that had the ability to address children's needs at the primary and secondary levels depending upon how the program is delivered. The programs that can be delivered in a classroom-wide or small group format are *Al's*

Pals, the *Devereux Early Childhood Assessment Program, I Can Problem Solve,* and the *Incredible Years Dina Dinosaur Training Program.*

Al's Pals

Distinguishing Features

Al's Pals consists of two different curricula for children ages 3–8. *Al's Pals: Kids Making Healthy Choices* (AP-KMHC) is a curriculum designed to be implemented in a classroom setting throughout the school year. *Al's Caring Pals: A Social Skills Toolkit for Home Child Care Providers* (ACP-SST) is a program which provides training and materials to help children develop social skills and healthy decision making.

Theoretical Grounding

Al's Pals curricula focus on the promotion of resiliency in children. A lesson is taught to children, which is reinforced by modeling and role play.

Focus

The intent of Al's Pals is to increase resiliency and reduce future substance abuse and violence by emphasizing prevention in children ages 4–5 years old. The primary goals of the program are to increase protective factors within a child's life by increasing their social-emotional competence and decrease the known risk factors of early and persistent antisocial and/or aggressive behavior (Lynch, Geller, & Schmidt, 2004).

Time Requirements

The AP-KMHC program is composed of 43 lessons lasting approximately 20 min long. The lessons are designed to be given over 23 consecutive weeks.

Parent Participation

No specific parent involvement strategies are included. However, letters are sent home to parents explaining what their children are learning within the AP-KMHC curriculum. Also, a separate program known as *Here, Now and Down the Road* is available for parents to participate in. This is not required to be delivered at sites delivering the child program(s).

Progress Monitoring Tools

No specific progress monitoring tools are included with the program.

Training

Training is available through workshops practitioners can attend, on-site trainings arranged with the company, and a web-based training for both programs. If training occurs in a face-to-face format, it is typically conducted in a 2-day workshop. The online training is conducted in seven 2-hour segments that are spread out over a few weeks. To find out costs of different training methods for a particular practitioner or group, contact the company by visiting the website: www.wingspanworks.com/contact_us.

Materials

The various materials for the Al's Pals program are available after completing training. Depending upon the particular program desired and the needs of the setting in which it will be implemented, costs vary.

Empirical Support

The AP-KMHC program has been evaluated during implementation for four school years in a row between 1993 and 1997. All evaluations of the AP-KMHC program have included control classrooms. The evaluations over the years showed that AP-KMHC program decreased ratings of behavior severity on the Child Behavior Rating Scale (Dubas, Lynch, Galano, Geller, & Hunt, 1998). Many sites continued to implement the program in all classrooms and provide data to the owners of the program for the 1997–2000 school years. The information from these centers indicates that the children increased their prosocial behaviors, social interaction, and positive coping skills (Lynch et al., 2004). These findings support the effectiveness of the program when implementation is not strictly controlled or conducted by highly trained teachers. The results of these studies indicate that AP-KMHC does meet criteria for a *Possibly Efficacious* treatment. As of publication of this guide, the ACP-SST program does not have any published research regarding its effectiveness.

Prevention Model Tier

Both programs could be considered as fitting into the primary level of prevention. However, since the *Al's Caring Pals* program is used more often with a smaller group of children, it could also be considered a secondary level of prevention since it could be used to give more extended instruction to children who may be struggling with behavior and/or emotional concerns.

Devereux Early Childhood Assessment (DECA) Program

Distinguishing Features

The DECA Program can be distinguished from other early childhood programs due to the primary emphasis on problem solving to identify and strengthen protective factors. A central component of this program is the use of the DECA Assessment within a five-step problem-solving process. The first two steps entail gathering information and administering the DECA to assist with problem identification. The third step is to summarize and interpret results as a method of problem analysis. The fourth and fifth steps are to develop and implement a plan to address the identified problem and then to evaluate child progress through multiple methods, respectively. The DECA program has been adapted for infant and toddler ages (DECA-I/T), children (DECA), and children who are school-age (DESSA). However, research has primarily focused on the DECA. Therefore, the DECA program will be reviewed in detail.

Theoretical Grounding

The DECA Program is grounded in research focused on resilience, or the achievement of positive outcomes despite adverse conditions (Wyman et al., 1999). By developing child strengths known to lead to positive outcomes, children are better equipped to handle stressors that occur within their life.

Focus

The DECA is designed to be used with children ages 2–6 years old. Within the intervention plans, there is an explicit focus on developing the protective factors of initiative, attachment, and self-control as a method of reducing behavior concerns.

Time Requirements

Most research on the program has used the strategies as part of a year-long preschool curriculum. No information was found on the website regarding implementing the strategies for less time. Additionally, no information was found on how long or how often DECA-specific strategies were used with children.

Parent Participation

The DECA program has a parent information source on promoting resilience in children entitled *For Now and Forever.* This text provides parents with simple strategies that can be implemented at home to extend skills being taught within the preschool setting.

Progress Monitoring Tools

Several tools are available to monitor child progress throughout the use of the DECA program. These are included with the purchase of the kit, although more are available for purchase through Kaplan. The tools include an observation journal, parent and teacher rating forms, and pre- and post-test tables. The DECA is also available in a web-based format which allows for data entry of information into a computer system. For more information on the forms and web-based DECA, visit www.kaplanco.com.

Training

DECA trainings are scheduled several times a year in multiple locations around the country. Those who are allowed to attend the training and learn to use the DECA include mental health professionals and early childhood professionals with graduate level training in assessment. If a practitioner does not have this level of training, he or she can attend a training and pass a competency assessment to be allowed to use the DECA. To find out information about training options, such as locations, scheduling, costs, and types of training, contact the Devereux Early Childhood Initiative at 866-872-4687.

Materials

The program kit is ordered through Kaplan (www.kaplanco.com). The entire kit, which includes user manuals, parent and teacher guides, record forms, and a strategy guide tied to the outcomes of the DECA assessment, costs approximately $200. Additional parts are available for purchase including parent guides and record forms in Spanish ($25–$40) and a set of children's books which focus on teaching positive skills ($160).

Empirical Support

A total of three unpublished studies were found that examined the effectiveness of the DECA assessment and program strategies in combination. The first two studies involved the piloting of the program in its entirety (Devereux Early Childhood Initiative, 2000; Lebuffe & Likins, 2001). The first 2 years of the pilot study included 545 preschool children split into a DECA-exposed group and a control group. The DECA-exposed group utilized the DECA assessment and program strategies throughout the school year. Some problems were noted with the reliability of teacher reports for use as measures of growth over the year. However, parent reports in both studies and teacher reports in the second year indicated that children within the DECA-group had increased levels of protective factors and decreases in behavior concerns.

A final study (LeBuffe, 2002) consisted of a DECA-exposed group and a control group which completed pre-test and post-test measures on protective factors and behavior concerns. Both measures were completed by parents and teachers. Regarding behavior outcomes, the control group showed worsening behavior ratings by both parents and teachers over the course of the school year. In contrast, children in the DECA-group had maintenance of behavior scores (i.e., no change from pre-test to post-test). In the protective factors ratings both groups showed improvements, with the DECA-group showing more improvement than the control group, although the differences between groups were not statistically significant.

All these data should be interpreted with caution because (1) differences between groups have not been statistically significant (2) the research has not gone through a peer review process, and (3) no independent replication studies have been conducted with other research teams. For these reasons, the DECA program is rated as *Possibly Efficacious.*

Prevention Model Tier

The DECA program can be used as a primary or secondary level of prevention, depending on if it is used with all children in a preschool classroom or just some who are identified as at-risk. Depending upon the number of strategies needed to assist a child and the resources required to implement these strategies, the program could be classified as a secondary level of prevention.

I Can Problem Solve/Interpersonal Cognitive Problem Solving (ICPS)

Distinguishing Features

The ICPS program has been developed through more than 30 years of research on interpersonal problem solving. The program is delivered to an entire classroom and is divided into two phases. The first phase focuses on teaching children the language necessary for problem solving, ensuring that they understand the meaning of the words. Examples include the words *different, not,* or *because.* The second phase of the program teaches children how to recognize specific emotions and the specific steps from problem solving. The overall focus of the program is to teach children *how to think* instead of instructing them *what to do*. This is accomplished through the use of games, stories, puppets, and role-playing.

Theoretical Grounding

The ICPS program heavily relies on cognitive components to accomplish problem solving. In addition, the use of role-playing and modeling incorporate Bandura's theory that children will repeat behaviors they see others engaging in.

Focus

The purpose of the program is to assist children in identifying emotions and learning and using problem-solving skills in order to reduce interpersonal conflict. The program is used primarily with older preschool children (ages 4–5) and has been implemented primarily with children who come from low-income, urban environments.

Time Requirements

The program is implemented over a 12-week period, with 20 min lessons being delivered every day of the week (59 lessons total). In addition to the scripted sessions, teachers are encouraged to use the problem-solving language when problems appear for children throughout the day to generalize skills beyond the planned intervention practice sessions.

Parent Participation

Parents can participate through a parallel program entitled *Raising a Thinking Child Workbook*. The workbook teaches parents to use dialogues at home that are similar to the ones used in school and include children in problem solving at home. The workbook is available in English and Spanish at www.researchpress.com and costs $23.95.

Progress Monitoring Tools

No tools are mentioned for progress monitoring on the Research Press website.

Training

Depending upon location, on-site training may be arranged. Costs, length of training, and availability vary. To arrange for staff training, contact Dr. Myrna Shure at 215-762-7205 or at mshure@drexel.edu.

Materials

The only material needed is the program manual, which is available through Research Press at www.researchpress.com. The manual costs $41.95. All materials can be replicated from the manual.

Empirical Support

A number of research studies have been conducted on the ICPS program dating back to 1976. The ICPS program was originally investigated in preschool and kindergarten classrooms, with studies indicating that children who complete ICPS generate more solutions to problems and have improved behavior ratings by teachers (Shure & Spivack, 1979, 1980, 1982). The ICPS program was also independently replicated with a preschool sample in rural Michigan (Feis & Simons, 1985). The results of this 3 year study found that children in the ICPS group were able to generate more potential solutions to problems and able to generate a wider array of solutions. In addition, the ICPS group also had lower ratings of problem behavior compared to controls (Feis & Simons, 1985). The replication of the ICPS program in a less-structured environment with a different population and still achieving similar outcomes lends support to the program's effectiveness. However, studies have documented that the program does not significantly reduce aggressive behavior in young children (Feis & Simons, 1985; Rickel & Burgio, 1982). The ICPS program is therefore rated as *Possibly Efficacious.*

Prevention Model Tier

This program falls into the primary prevention tier, since it is used with entire classrooms. However, the program can be used with small groups of children who are struggling with demonstrating correct behavior in class. In the latter situation, the program would be considered a secondary level of prevention.

Incredible Years Dina Dinosaur

Distinguishing Features

The Incredible Years Dina Dinosaur Training Program (DDTP) can be distinguished from other interventions since it has been adapted for use with small groups or as a prevention program within a classroom setting. DDTP is meant to be used with children between the ages of 4–8, with lessons adapted for different ages (Webster-Stratton & Reid, 2003).

Theoretical Grounding

DDTP is grounded in research focusing on specific behaviors which predict later aggressive and noncompliant behavior. By remediating these behaviors early on, the program seeks to reduce the likelihood of developing conduct disorder (Webster-Stratton & Reid, 2003). The program takes a social learning approach to teaching

skills which integrates Albert Bandura's self-efficacy theory to promote the use of new prosocial skills within children. The self-efficacy influence is evident in the emphasis on modeling and practice within each session.

Focus

The DDTP focuses on reducing noncompliant and other problem behavior by teaching social skills and play skills, promoting the use of self-control strategies, providing knowledge on labeling feelings, practicing perspective taking, and boosting academic success and confidence. As a result of participating in the program, children typically have increases in self-esteem and self-confidence and reductions in defiance, aggressive behavior, bullying, stealing, lying, and other behaviors associated with noncompliance.

Time Requirements

The small group format is designed to be carried out in 22 sessions held once a week. Each group meeting lasts about 2 hours and can be held in conjunction with the parent training meetings. The classroom curriculum is delivered throughout the school year, 2–3 times each week in a 20–30 minute block.

Parent Participation

Parents participate in the Incredible Years training program, often at the same time as their children. Often the parents will attend a BASIC training which covers initial principles and then continue training with a secondary set of parent trainings that focuses on advanced skills or promoting school success, depending upon the child's age. Although the parent and child curricula are aligned, no joint meetings between the groups are planned.

Progress Monitoring Tools

A number of progress monitoring tools are available for free on the program's website (www.incredibleyears.com). The child outcomes are measured through two forms of assessments: games and classroom observations. The two "game" assessments focus on labeling feelings from the perspective of others and assessing what a child might do in a social situation by asking them to describe their behaviors. Both these assessments have separate prompts for boys and girls and inquire about situations that are relevant to children. The classroom observation tools codes child behavior, classroom environment, and teacher behavior to determine changes that may have resulted from the program.

Training

The training requirements for the child program are similar to the other Incredible Years programs. However, depending on the professional role of the group leader, the training set-up may differ. If a classroom teacher plans to implement the child curriculum in the classroom, training is typically completed in four 8-hour days which may be completed in 1 week or be spread out over a few weeks. The certification process for other professionals follows a similar pattern to the training for the parent program, with workshops lasting approximately 3 days and costing around $400. Information for all trainings can be found on the Incredible Years website at www.incredibleyears.com. Like other Incredible Years programs, additional training is required to become a certified group leader or a certified mentor, which allows providers to provide training with the title or to train other providers, respectively.

Materials

The DDTP complete kit for small groups is $1,150 and the classroom costs a little bit more ($1,250) due to the inclusion of five lesson plan manuals.

Empirical Support

Two randomized control trials have been conducted which include an evaluation of the DDTP (Webster-Stratton & Hammond, 1997; Webster-Stratton, Reid, & Hammond, 2001a). The initial study examined the impact of various combinations of the Incredible Years Programs compared to a control group. The three groups that received intervention were given either extended parent intervention, parent intervention and child intervention, or only the child intervention (DDTP). Results of the initial trial showed that all treatment conditions resulted in positive outcomes for families (reduced problem behavior and increased use of prosocial skills), but the conditions that included DDTP also resulted in improvements in child problem solving and conflict management skills (Webster-Stratton & Reid, 2003). These changes were maintained when families were followed up with 1 year later, but the strongest impact was evidenced by the group which received both the parent and child training. For this reason, these programs are recommended to be used together.

The second trial investigated whether teacher training resulted in further improvement in outcomes since the initial study revealed that children had *increases* in problem behavior at school at the 1-year follow-up (Webster-Stratton & Reid, 1999). The results of this study suggested that adding teacher training to the child and parent trainings results in reduction of problem behaviors at school and home (Webster-Stratton et al., 2001b). Thus, DDTP is rated as *Possibly Efficacious.*

Prevention Model Tier

If the program is used as a classroom curriculum, the intervention can be considered as a tier 1, or primary prevention strategy. This is because all children are receiving the intervention and it is designed to promote prosocial skills in order to prevent problem behavior. If the program is used with a small group of children (ideally 6 or less; Webster-Stratton & Reid, 2003), it should be considered as a secondary prevention approach (tier 2). This is because the small group will require more resources and the curriculum is a more focused intervention for these children who are already deemed at risk for developing problem behavior.

Classroom Programs: Tertiary Prevention

Three programs require extensive time and effort from practitioners. The use of these programs should be reserved for children with very challenging behaviors. These programs are *Early Start Denver Model, First Step to Success,* and *Learning Experiences and Alternative Programs for Preschoolers and Their Parents.*

Early Start Denver Model

Distinguishing Features

The Early Start Denver Model (ESDM) was created by Sally Rogers & Geraldine Dawson and represents an intensive early childhood intervention for children diagnosed with autism spectrum disorders (ASD) not arising from a chromosomal abnormality. The program combines multiple interventions which have been used with children who have been diagnosed with ASD, including techniques which are associated with Applied Behavior Analysis (ABA), and those that are non-ABA. In addition, this model is designed to be implemented with a team of early childhood professionals that can address multiple areas of child development.

Theoretical Grounding

ESDM utilizes an eclectic approach that incorporates multiple theories to understand development and theories specific to the impact ASD has on child skills. Since the ESDM is a combination of Pivotal Response Training and the Denver Model, it also draws upon theories of social learning and cognitive development (Piaget), respectively.

Focus

The focus of ESDM is children between the ages of 12 and 60 months, although some reports vary as to exact age ranges. The ESDM is designed as a comprehensive developmental behavioral intervention that improves developmental outcomes in multiple domains (e.g., communication, socialization, cognition, and adaptive behavior).

Time Requirements

The program is very time-intensive, with one-on-one therapy occurring for 20 hours per week (two 120 minutes sessions each weekday) with the child. The program is implemented in this manner for 2 years. In addition, other therapies (e.g., occupational, speech) are carried out in conjunction with, but at a separate time from, ESDM training sessions.

Parent Participation

Parents participate in a separate parent training component which meets for 12 sessions (90 minutes each session) and is then followed by four 90 minutes follow-up visits. The parent training consists of teaching parents to implement techniques from the ESDM (Vismara & Rogers, 2008).

Progress Monitoring Tools

Progress is to be monitored with the Early Start Denver Model Curriculum Checklist which is available in sets of 15 for $48.00 from multiple bookstores. Within the practitioner's manual there are also example forms that can be used to track child progress on specific objectives.

Training

Implementation of ESDM requires extensive training. Prerequisites for training include: (1) having a postbaccalaureate degree in a field related to education, (2) working regularly with children 1–4 years old who have autism, and (3) having the resources necessary to submit training materials to the training center for fidelity checks. The website provides a step-by-step process for practitioners (www.ucdmc.ucdavis.edu/mindinstitute/research/esdm/). However, a brief outline is provided here: (1) purchase and read the ESDM manual (ISBN: 978-1606236314) and curriculum checklists (ISBN: 978-1606236338)—each costs approximately $48.00, (2) attend the sequence of trainings (introductory, advanced, parent coaching, and trainer of trainer) which cost $375 per training, and (3) after each workshop, submit

two rounds of products for certification purposes and to receive feedback. The training is sequenced so that practitioners must become certified for one workshop before registering and completing the next workshop in the sequence. All trainings are currently held in Sacramento, but on-site trainings can be arranged with the authors. To request an on-site training or gather more information, practitioners can call email megan.manternach@ucdmc.ucdavis.edu.

Materials

Besides the manual and checklists, multiple other materials are needed to implement sessions. Practitioners are directed to the manual and curriculum checklists for complete lists of required and suggested materials.

Empirical Support

One randomized control trial was found for ESDM (Dawson et al., 2010) and several other studies were noted by the program authors to be in press, but not yet available. In the Dawson et al. (2010) study, the authors reported a number of positive outcomes (i.e., changing diagnosis for Autism Spectrum Disorder to Pervasive Developmental Disorder—Not Otherwise Specified, increases in IQ) and a number of flaws within the study and the measures used for evaluation are not addressed. Due to these flaws, caution is recommended in interpreting the claims of the effectiveness of the program. In particular, outcomes of the second year of implementation were not significantly different from first year outcomes, indicating that the second year of extensive intervention may not yield large improvements. Thus, ESDM is rated as *Possibly Efficacious.*

Prevention Model Tier

Due to the extensive number of resources required to implement this program in a similar manner to the research that has been conducted, this program would fall into the third tier of prevention. For children to utilize these services, they require a diagnosis of ASD.

First Step to Success

Distinguishing Features

The First Step to Success (FSS) Program has programs available for preschool and kindergarten levels. FSS is composed of three unique modules. The first

component involves universal screening to determine which children are at risk for not developing appropriate skills. In the second module, parents, teachers, and a consultant work together to develop contingencies for an identified child within the classroom so that the child may earn rewards at school for him/herself and his/her classmates as well as at home based on behavior. The final component of the program involves the consultant working with the parents to teach and have their child practice new skills to improve their behavior (Walker, Severson, Feil, Stiller, & Golly, 1998).

Theoretical Grounding

The FSS program is grounded in social learning theory. The program also heavily emphasizes a prevention perspective, theorizing that using early and intensive interventions for at-risk children will reduce behavior problems and negative long-term outcomes. Finally, the incorporation of parents into the modules supports the program's ecological perspective.

Focus

The FSS program for preschool is designed to be used with children who are between the ages of 4 and 5 years old. Children are identified as likely to develop severe problematic behaviors.

Time Requirements

The intervention is carried out throughout the year, but the formal intervention period in classrooms is around 30 classroom days (Powell & Dunlap, 2009). However, the intervention may be extended or altered depending on the child's response to separate components.

Parent Participation

Parents of a child who has been identified as at-risk for poor outcomes due to risk factors in their background and their problematic behavior participate in the program. During the time where the child is receiving the intervention in the classroom, parents are to reward children once they arrive home on days where the target behavior is achieved. In addition, parents participate in training sessions, one-on-one with the consultant, to develop and implement interventions to reduce or eliminate problematic behaviors at home.

Progress Monitoring Tools

No progress monitoring tools are provided. However, progress is documented based upon each child's individual needs and goals.

Training

For information on training, contact the program's author, Hill Walker, Ph.D., at (541) 346-2583 or by email at hwalker@oregon.uoregon.edu.

Materials

The kit for preschool costs $166.49 and is available from http://store.cambiumlearning.com. The kit includes an implementation guide, Home-Based Coach guide, Parent handbook, and an overview video. In addition, a resupply kit is needed for each new group of children the program is implemented with. The resupply kit is available from the same website and costs $53.95 and includes materials for one additional implementation. However, the most essential component of the program is a well-trained consultant who can effectively implement the FSS program.

Empirical Support

All of the research on FSS focuses on children who are in elementary schools (kindergarten through second grade). No research was found regarding the effectiveness of the preschool application of the program. However, studies on the kindergarten program have shown that children who complete the FSS program fall within the normal or typical range on measures of aggression, time engaged in class activities, and adaptive and maladaptive behavior rating scales (Golly, Sprague, Walker, Beard, & Gorham, 2000; Lien-Thorne & Kamps, 2005; Russell Carter & Horner, 2007). Also, the changes observed in children have been maintained for 1–2 years after the intervention was implemented (Epstein & Walker, 2002). Since the research is limited to Kindergarten, no criteria is met for determining the evidence base for the preschool curriculum. Thus, FSS is rated as *Possibly Efficacious.*

Prevention Model Tier

The FSS program is considered a tertiary level prevention program since it works intensely with one child who is displaying problematic behaviors. The coordination of multiple interventions in multiple settings (i.e., home and school) makes this program a more complicated intervention than others placed at lower tiers.

Learning Experiences and Alternative Programs for Preschoolers and Their Parents (LEAP)

Distinguishing Features

LEAP is a preschool curriculum that focuses on inclusion of children with autism in a typical classroom. The classroom is set up to have 10 typically developing children and 3–4 children with autism. LEAP uses typically developing peers within the classroom to increase social interactions. Teachers review the specific goals of the children with autism on a weekly basis and measure progress toward these goals. The curriculum used within the classroom is designed to meet the needs of children who fall developmentally between the ages of 12 and 72 months (Strain, 1987). Other professionals besides the classroom teachers are brought in on an as-needed basis, such as speech pathologists or occupational therapists. The program also includes a family component described below. This program should not be confused with Kennedy Krieger's LEAP program (Lifeskills and Education for Students with Autism and other Pervasive Behavioral Challenges), which provides intensive serves to children ages 5–21 in a noninclusive setting.

Theoretical Grounding

LEAP incorporates social learning theory and developmental theory (Strain, Kohler, & Goldstein, 1996) throughout all aspects of class-wide and individual intervention. Also included within the program is an emphasis on peer- and adult-mediated strategies within interventions to assist children with autism in developing new skills. To unify the diverse needs, the curriculum used within classrooms, *The Creative Curriculum* (Dodge & Colker, 1988), serves as a general guide to programming activities.

Focus

The goal of the program for the children with autism is to promote development and improve skills in social, emotional, language, adaptive behavior, cognitive, and physical domains. LEAP does this by exposing children with autism to preschool activities that typically developing children would engage in and by only adapting the curriculum when it is deemed necessary (Strain et al., 1996)

Time Requirements

Children attend the school setting year-round for 15 hours each week (3 hours/day). In addition, parent training is offered at multiple points during the year.

Parent Participation

Parent involvement is essential within the LEAP program (Strain et al., 1996). Parents can participate by completing activities within the classroom, or by attending a parent education program. Also parents of children who have moved out of LEAP may provide information or support to newly enrolled parents (Strain et al., 1996). In the parent training portion of the program, parents are taught skills and how these skills can be implemented in multiple settings (Strain, 1987). In later phases of the parent training, parents develop and implement interventions to assist their child as well as gather information on the interventions' effectiveness (Strain, 1987).

Progress Monitoring Tools

Most studies used progress monitoring tools specific to the behaviors of concern. These included observational tools and rating scales such as the *Childhood Autism Rating Scale* (CARS; Schopler, Reichler, & Renner, 1988).

Training

Teachers must have a master's level degree in an education or related field. No further information regarding training is available. To find out more about the curriculum, the LEAP Outreach Project can be contacted via the Teacher's Toolbox website or at 866-811-8665. To inquire about training opportunities, contact Ted Bovey, M.A., at ted.bovey@cudenver.edu or by phone at 303-315-4934.

Materials

A variety of materials are needed to implement this program since it is a full preschool curriculum. Children engage in a number of activities throughout the year and engage in play in multiple centers which must be filled with toys that prompt child-led play and specific social skills.

Empirical Support

The LEAP Program and its individual components have had numerous studies that support the effectiveness of the program. While a thorough review of the research is beyond this section, a few key findings are presented. After 2 years of being enrolled in a LEAP preschool, children with autism show reductions in autistic symptoms and increases in intellectual and language domains (Hoyson, Jamieson, & Strain, 1984; Strain & Cordisco, 1993). Typically developing children have no documented negative outcomes and several positive outcomes including better social skills and

fewer disruptive behaviors (Strain, 1987). With regard to the family component, family members who have participated in the LEAP program are significantly less likely to show signs of stress and depression when compared to families not enrolled in the program (Strain, 1987). The evidence supporting the LEAP program has been consistent and for that reason it is considered to be a scientifically based best practice for working with young children diagnosed with autism (Simpson, 2005) and meets criteria as a *Possibly Efficacious* treatment.

Prevention Model Tier

Because the LEAP program requires children to have a diagnosis of autism for particular students to be included and a number of resources must be devoted to the classroom, this program falls into the tertiary level of prevention services. However, providers should note that a continuum of services are provided to children diagnosed with autism. Most interventions occur on a class-wide level, with some components of the program being implemented in a small group or individual basis.

Conclusions

Children's development can best be supported by attending to their relationships and the environments in which they live, including home, school, and community settings. Evidence-based programs are available to address multiple risk factors, enhance caregivers' skills, and improve children's prosocial skills which lead to more optimal outcomes for children and their families. EBPs are often organized within a prevention framework, which enable families, schools, and communities to provide the care and nurturing that children need by informing them about development and reserves the most intensive resources to address the needs of those most at risk.

The two primary formats for delivery of services include parent/child interventions and child/classroom curricula. In either case, the purpose of the intervention is to help children reach their full potential, so that they can be happy, healthy, and productive individuals. Depending upon the program, services may be provided in the home, school, or other community setting. Some intervention packages even allow for individual, self-paced instruction. The skills and competencies needed to improve development can be taught to children, parents, and other caregivers. In the case of children with diagnosed conditions such as autism spectrum disorders, interventions become more labor-intensive, require additional preparation on the part of the trainer, and as such, become more expensive to deliver. More research is needed to document interventions which are effective, responsive, culturally sensitive, and developmentally appropriate and can be used in evidence-based practice.

Assess Your Knowledge

1. What program is commonly conducted out of a medical clinic or pediatrician's office?

   a. Triple P
   b. Incredible Years
   c. Nurse-Family Partnership
   d. Reach Out and Read

2. Which program can only be carried out by a registered nurse?

   a. Helping Our Toddlers, Developing Our Children's Skills
   b. Nurse-Family Partnership
   c. Reach Out and Read
   d. Parent–Child Interaction Therapy

3. Which program is *NOT* considered a well-established treatment according to the Chambless and Hollon (1998) criteria?

   a. Parent–Child Interaction Therapy
   b. DECA Program
   c. Incredible Years
   d. Helping the Noncompliant Child

4. Which program requires no formal training beyond familiarizing oneself with the manual?

   a. Helping the Noncompliant Child
   b. Parents as Teachers
   c. Reach Out and Read
   d. Nurse-Family Partnership

5. Which of the following programs is *NOT* specifically designed for children diagnosed with Autism Spectrum Disorders?

   a. Lovass ABA
   b. First Step to Success
   c. Early Start Denver Model
   d. Learning Experiences and Alternative Programs for Preschoolers and Their Parents (LEAP)

6. Which of the following programs can *NOT* be used in a small group format?

   a. Lovaas ABA
   b. Dina Dinosaur
   c. I Can Problem Solve
   d. Al's Pals

7. Joanie was physically abused by one of her relatives for 6 months. The abuse has stopped, but she is experiencing nightmares and avoids entering the neighborhood where the abuse occurred. Which program might be best for her?

   a. Trauma-Focused Cognitive Behavior Therapy
   b. Early Start Denver Model
   c. First Step to Success
   d. Devereux Early Childhood Assessment Program

8. Representing the importance of developing this skill in early childhood, which of the following is a focus in the majority of early childhood interventions?

   a. Developing problem-solving skills
   b. Identification of emotions
   c. Self-control
   d. All of the above

9. Which intervention combines a parent/interventionist team to address one child's problem behavior?

   a. Dina Dinosaur
   b. I Can Problem Solve
   c. Early Start Denver Model
   d. Promoting Alternative Thinking Strategies

10. Which two programs focus specifically on increasing child resiliency in order to cope with future stressors?

    a. The Devereux Early Childhood Assessment Program & Tools of the Mind
    b. Tools of the Mind & Promoting Alternative Thinking Strategies
    c. Al's Pals & the Devereux Early Childhood Assessment Program
    d. Promoting Alternative Thinking Strategies & Al's Pals

Assess Your Knowledge Answers
1) d 2) b 3) b 4) a 5) b 6) a 7) a 8) d 9) c 10) c