Family-Focused Interventions for Promoting Social-Emotional Development in Infants and Toddlers with or at Risk for Disabilities

Diane Powell and Glen Dunlap September 2010



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ROADMAP TO
EFFECTIVE
INTERVENTION
PRACTICES



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Roadmap to Effective Intervention Practices

Family-Focused Interventions for Promoting Social-Emotional Development in Infants and Toddlers with or at Risk for Disabilities

Diane Powell and Glen Dunlap, September 2010

This document is part of the *Roadmap to Effective Intervention Practices* series of syntheses, intended to provide summaries of existing evidence related to assessment and intervention for social-emotional challenges of young children. The purpose of the syntheses is to offer consumers (professionals, other practitioners, administrators, families, etc.) practical information in a useful, concise format and to provide references to more complete descriptions of validated assessment and intervention practices. The syntheses are produced and disseminated by the Office of Special Education Programs (OSEP) Technical Assistance Center on Social Emotional Intervention for Young Children (TACSEI).

INTRODUCTION

This document is one in a series of syntheses intended to provide summaries of existing evidence related to assessment and intervention for social-emotional challenges of young children and for promoting the social-emotional competence of all young children. The purpose of the syntheses is to offer consumers (professionals, other practitioners, administrators, families, etc.) practical information in a useful, concise format and to provide references to more complete descriptions of validated assessment and intervention practices. The syntheses are produced and disseminated by the OSEP Technical Assistance Center on Social-Emotional Interventions (TACSEI).

This synthesis considers family-focused services and practices for promoting social-emotional development of children served in Part C. Its specific focus is on interventions that influence parenting practices for infants and toddlers with or at risk for disabilities.

The general effectiveness of early intervention services in promoting the well-being and development of children and their families has been well established through what Guralnick (1997) has termed "first-generation" research. This includes many strategies including procedures that seek to enhance child development through parent mediated interventions.

The field has now moved on to more specific "second-generation" research questions: what works for which families and children, under what conditions? Answers to these questions can provide practitioners with specific guidance in the selection, design and implementation of interventions and practices that produce optimal outcomes for infants and toddlers and their families. A substantial knowledge base exists regarding: 1) the role of positive interactional and parenting practices in shaping social emotional development of infants and toddlers, and 2) specific family-focused strategies and interventions that are effective in addressing social emotional competencies and challenging behavior in young children. The results of this research form the basis for this synthesis.

The development of behavioral/emotional self-regulation and the ability to establish secure attachments and positive relationships with others during infancy and toddlerhood form the foundation for later social emotional competence and well-being (National Scientific Council on the Developing Child, 2004a). It is through interactions with others, and especially with primary caregivers, that these foundational capacities and competencies emerge. This is true for all children, both typically developing and those with or at risk of disabilities (National Scientific Council on the Developing Child, 2004b, 2008; National Research Council and Institute of Medicine, 2000). Many young children at risk for disabilities or with

identified disabilities develop social emotional competencies on an age-appropriate timeline. For others, deficits in physical, cognitive or communicative abilities may interfere with social emotional development, making early intervention to support effective caregiving practices even more critical.

The important role of family-mediated strategies in early intervention is well accepted as evidenced by the inclusion of parenting competencies in early intervention theories of practice (Odom & Wolery, 2003), the recommended practices of the Division of Early Childhood of the Council for Exceptional Children (Trivette & Dunst, 2005) and in recommendations for family outcomes in early intervenion (Bailey et al., 2006). In fact, some have argued

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that ensuring parent involvement and responsiveness is a necessary component of early intervention without which child directed intervention services are unlikely to be effective (Mahoney, 2009).

The need for early intervention systems to develop the capacity to provide effective parenting interventions to families they serve has taken on heightened importance with the advent of the CAPTA and IDEA mandates for referral to Part C of children involved with the child welfare system. The developmental and early intervention needs of infants and toddlers served by the child welfare system are well documented (Barth, et al., 2008; Rosenberg & Smith, 2008; Wiggins, Fenichel & Mann, 2007). It is estimated that these new mandates will result in large increases in referrals and enrollment of infants and toddlers with substantiated maltreatment in early intervention systems (Derrington & Lippitt, 2008).

The teaching of nurturing, responsive interactions and effective parenting practices is central to many interventions that have demonstrated effectiveness in preventing and intervening with parents who are at-risk for child maltreatment (Baggett, Carta, et al., 2010; Chaffin & Friedrich, 2004; Geeraert, Van den Noortgate, Grietens & Onghena, 2004; Hammond, 2008). However, providing such interventions to families involved in child welfare presents new and complex challenges for early intervention systems. These challenges include engaging and serving families with severe and multiple risks; the voluntary nature of early intervention services in contrast to the mandates and court orders that typically govern family involvement with child welfare systems; continuity of programming for children who may experience frequent changes of placements and caregivers; and coordinating with multiple service providers from different systems (Derrington & Lippitt, 2008; Dicker & Gordon, 2006; Rosenberg, Smith & Levinson, 2007; Stahmer, Thorp Sutton, Fox & Leslie, 2008).

While this synthesis does not focus specifically on interventions for maltreatment, it does note when an intervention has been evaluated with children experiencing trauma or maltreatment or with parents for whom child maltreatment is a concern.

PURPOSE, SCOPE AND ORGANIZATION OF THE SYNTHESIS

The purpose of this synthesis is to present summary information on family-centered practices, and on interventions aimed at promoting positive parenting practices, teaching parenting skills, and influencing parent child interactions that have demonstrated associations with positive social emotional development for children aged 0-3 years. The synthesis is intended to provide guidance to early intervention personnel, both those providing services to families and children within the Part C system and those working within other service frameworks.

The synthesis does not include interventions aimed primarily at communication and language outcomes for children unless the practices have also been demonstrated to enhance social emotional outcomes. It also does not include large scale, multicomponent service delivery models such as Early Head Start, Healthy Families, SafeCare and Nurse-Family Partnership although it should be noted that there is a substantial literature documenting the efficacy and effectiveness of such models in supporting multi-risk families (Chaffin & Friedrich, 2004; Geeraert et al., 2004; Love et al., 2005). Rather, the focus of this synthesis is on the parenting knowledge, skill sets and practices that have proven effectiveness and can serve as the content of parenting education delivered through these service models.

The synthesis first reviews the evidence for family-centered approaches and practices. Next it examines the literature concerning parent-child interactions and parenting behavior including knowledge gleaned from existing meta-analyses and reviews of the pertinent empirical literature. This includes both content (parenting/caregiving behaviors that impact infant/toddler social emotional outcomes) and methods (practices effective in supporting and changing caregiver behavior). This is followed by a consideration of some of the relevant intervention materials, packages, curricula and models for families of infants and toddlers that are available. Finally, factors to consider in selecting family-focused interventions are discussed.

REVIEW OF THE EVIDENCE

Family-Centered Approach and Practices

Family-centeredness refers to a philosophy of service delivery—an approach to the delivery of services based on

values and beliefs regarding how professionals interact with and relate to the families they serve. While there are variations in how family-centeredness is defined and characterized, it typically includes: 1) treating families with dignity and respect; 2) practices that are individualized, flexible, and responsive to the expressed needs of families; 3) information sharing that enables families to make informed choices; 4) family choice regarding program practices and intervention options; 5) parent-professional collaboration and partnerships; and 6) active involvement of family members in the mobilization of services and supports (Dempsey and Keen, 2008; Dunst, Trivette & Hamby, 2008). Similar conceptualizations emphasizing the primary role of families and family strengths and assets-based practices can be found in DEC's recommendations for family-based practices (Trivette & Dunst, 2005).

A family-centered approach has been well accepted in the field of early intervention from a philosophical and values-based perspective. Recent reviews and meta-analyses have provided documentation that when service delivery incorporates familycentered practices, outcomes for family and children are improved including parenting capabilities and positive child behavior and functioning (Dempsey & Keen, 2008; Dunst, Trivette and Hamby, 2006, 2007, 2008). Dunst, Trivette and Hamby (2006, 2007, 2008) classified family-centered practices as relational (clinical skills such as active listening, compassion, empathy, respect and beliefs regarding family member strengths and capabilities) or participatory (individualized, flexible, responsive to family priorities, providing informed choices and family involvement in achieving goals and outcomes) and found in their meta-analyses that participatory practices were most strongly linked with child outcomes including behavioral outcomes.

We now turn to a consideration of the role of parent responsiveness and parenting behaviors in the social emotional

development of infants and toddlers. Parents or other primary care providers are the key mediators of experience for infants and toddlers, and thus their influence is critical during this period of rapid development of foundational skills and competencies.

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The Role of Parental Responsivity/Sensitivity

A large body of research points to responsive, sensitive parent-child interactions as essential to promoting healthy social emotional development in infants and toddlers. While parental responsivity/sensitivity has been defined in a variety of ways, it generally refers to interactions between infants/

young children and adult caregivers that are warm and accepting; responsive to the child's cues, initiations and lead; appropriate to the child's developmental level and interests; and mutually rewarding.

A number of research syntheses, meta-analyses and reviews have explored the associations between parental responsivity/sensitivity and social emotional outcomes in infants and toddlers.

They provide support for the following propositions:

- Parental responsiveness, including both contiguity (promptness and frequency of response) and affective quality of responding to infant behavior, is positively related to later (12-15 months of age) secure attachment in typically developing and at-risk infants. (Kassow & Dunst, 2007a)
- Parental sensitivity is multi-dimensional. A cluster of interaction characteristics strongly related to infant attachment outcomes includes response quality (ability to accurately perceive and interpret infant signals and respond promptly and appropriately), synchrony (reciprocal and rewarding interactions) and mutuality (parent and child joint attention). A second cluster of characteristics found to be related to child attachment consists of positive parental attitude (parental demonstration of positive affect toward child), stimulation (parental use of stimulation and encouragement with child) and support (parent attentiveness and availability to child). (DeWolff & van IJzendoorn, 1997; Kassow & Dunst, 2007b).
- In young children (< 2 years) with disabilities or at risk for developmental delays, parental responsiveness that is contingent (occurs promptly and in response to child behavior) and is appropriate and sensitive (matches the developmental level and mood of the child) is positively related to child social emotional outcomes including outcome measures taken more than two years after the initial responsiveness measures. Immediate child outcomes included increased positive affect and social responsivity; follow-up outcomes included increased prosocial problem-solving and decreased teacher-rated behavior problems. (Trivette, 2007)

In summary, the importance for social emotional development of responsive, sensitive interactions between caregivers and infants/young toddlers, in which caregivers accurately and promptly respond to child cues with warmth and affection in a manner that maintains the child's attention and the interaction sequence, is well documented.

Family-Focused Intervention Approaches for Infants and Toddlers

Evidence from meta-analyses has established that interventions can successfully teach responsive, sensitive interactions skills to parents, and that parental use of these competencies in turn impact child social emotional and behavioral development, especially attachment outcomes (Bakermans-

...interventions can successfully teach responsive, sensitive interactions skills to parents, and... parental use of these competencies...impact child social emotional and behavioral development...

Kranenbug, van IJzendoorn & Juffer, 2003; van IJzendoorn, Juffer & Duyvesteyn, 1995).

Several meta-analyses have examined the characteristics of effective interventions for teaching responsive, sensitive parenting skills. Results indicate that interventions for teaching responsivity/sensitivity to parents are most effective when they a) are behaviorally oriented, relatively brief (<16 sessions), and highly-

focused; b) occur before 6-8 months of age; c) use video tape models and feedback; and d) emphasize caregiver awareness and attention to child's signals and behavior, accurate interpretation of child's intent to communicate and interact, and appropriate and prompt parent responsiveness to child's behavior (Baggett et al, 2010; Bakermans-Kranenbug et al., 2003; Dunst & Kassow, 2007; van IJzendoorn et al., 1995).

As children progress through the second and third years of life, social emotional behavior becomes more complex and the skill sets needed by parents to support healthy social-emotional development also expand. Children learn to function more independently, both personally and socially; they establish social relationships with others and learn how to interact harmoniously with peers and adults. They develop empathy and learn interpersonal problem solving and conflict resolution skills. They become better at regulating their behavior and feelings by learning to manage anger and other strong emotions. During this period, parent skills can be instrumental in promoting social competencies, fostering emotional development, and managing behavior in order to support healthy social emotional growth or to intervene early to remediate developing behavior challenges or social-emotional delays.

A set of reviews and meta-analyses provides evidence regarding the effectiveness of parenting intervention, education, and training programs that extend beyond teaching responsivity/

Inset Box #1

| Parenting Skills that | Support Infant-Toddler Social Emotional Development |
|---|---|
| Parental Skills | Definitions/Components/Examples |
| Parent responds to child in ways that are contingent, sensitive, affectionate and reciprocal | Parent responds to child initiations promptly and frequently Parent perceives and interprets infant signals accurately Parent responses are appropriate to the developmental level and mood of the child Parent responses are expressive, warm and affectionate Parental responses promote joint attention, turn-taking and mutually reinforcing interactions |
| Parent establishes predictable routines and schedules | Sleeping, eating, transitions |
| Parent uses behavior management skills to foster appropriate behavior, and prevent and manage challenging behaviors | use of praise, attention, incentives, reinforcers, natural and planned consequences, redirection, planned ignoring and limit-setting |
| Parent teaches and encourages use of foundation social/emotional skills | Focusing on faces, gaze following, joint attention, clear signaling, self-soothing |
| Parent teaches and encourages use of social skills and competencies | Sharing, being respectful, waiting, asking, taking turns, cooperation, peer play, resolving conflicts |
| Parent teaches and encourages use of emotional skills and competencies | Identifying and labeling emotions, appropriate expression of feelings, empathy |
| Parent engages in positive interactions and play with child | Positive play, child-directed play |

sensitivity to include additional parenting skills needed as children develop in the early years of life. These are interventions intended to affect parent attitudes and expectations, promote parent-child relationships, teach behavior management skills, and teach parents skills to support their child's social-emotional self-regulation and competencies. Evidence from reviews and meta-analyses and from research on individual parenting interventions indicates that such programs can successfully impact parenting behavior and in turn, child social emotional development and outcomes (Baggett et al., 2010; Barlow, Parsons & Steward-Brown, 2005; Bryant, Vizzard, Willoughby & Kupersmidt, 1999; Eyberg, Nelson & Boggs, 2008; Landry, Smith, Swank, & Guttentag, 2008; Lundahl, Nimer & Parsons, 2006; Lundhal, Risser & Lovejoy, 2006; Sanders, Markie-Dadds & Turner, 2003).

A few meta-analyses have examined content and process components having the strongest associations with parenting intervention effectiveness. Kaminski, Valle, Filene and Boyle (2008) found that teaching parents emotional communication skills (e.g. active listening, helping children to identify and label emotions and to appropriately express emotions), positive interaction skills (engaging in positive, non-disciplinary interactions with child, engaging in child selected and directed play activities, demonstrating enthusiasm and providing positive attention for appropriate child behavior), and responsivity, sensitivity and nurturing (responding sensitively to child's emotional and psychological needs including soothing, and providing developmentally appropriate physical contact and affection) produced strong effect sizes. In addition, including practice sessions with the participants' own children was

Inset Box #2

Characteristics of Effective Interventions for Teaching Parenting Skills that Support Infant-Toddler Social Emotional Development

Characteristic

- Behaviorally oriented, brief, focused
- Systematic monitoring of skill acquisition/progress
- Explicitly teach strategies for incorporating skills into daily routines and activities
- Practice sessions with parent and child
- Use of modeling, role-playing, guided practice, coaching and feedback
- Use of demonstration videos with discussion
- Videotaping of parent-child interactions with feedback and discussion
- Homework, practice activities, workbooks

found to be important. A meta-analytic study by Lundhal, Risser & Lovejoy (2006) found for programs designed to reduce disruptive child behavior, individually delivered compared to group delivered parent training produced greater

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child change, especially for economically disadvantaged families. Finally, Lundhal, Nimer & Parsons (2006) examined the effectiveness of parent training programs designed to reduce the risk of child abuse. Moderator analysis revealed significant effects for behavioral orientation, use of a home visitor, delivering services in both the home and office, and use of both individual and group sessions.

These findings, along with an examination of the common content of parenting interventions that have demonstrated positive social-emotional outcomes for infants and toddlers provide guidance regarding parenting skills and competencies that are important during the infant and toddler years. This information is summarized in Inset Box #1: Parenting Skills that Support Infant-Toddler Social Emotional Development and Inset Box #2: Characteristics of Effective Interventions for Teaching.

INTERVENTIONS FOR SUPPORTING PARENTAL/CAREGIVER SKILL DEVELOPMENT

A number of interventions, in a range of formats, aimed at enhancing parental interactional and caregiving skills for promoting healthy social-emotional development in infants and toddlers have been developed, implemented and evaluated. These include 1) parenting curricula and programs delivered individually, usually in either a clinic or home setting; and 2) parenting programs delivered in a group format. In addition, there are many educational/instructional materials and tools such as tip sheets, toolkits, home visitor materials and DVDs that are available for work with families that we have not reviewed in this synthesis.

The accompanying table highlights one or more interventions in each of the above categories. This is not meant to be a comprehensive compendium; rather, it presents some of the better known tools/interventions/programs/models that are research based or research informed and is meant to acquaint the reader with the types of interventions available.

For each intervention, the following information is provided:

 Program Name and information on accessing program materials and information; includes website, if available, and/or citations for manuals or other materials. If materials are available in Spanish, this is indicated.

- **Purpose** of the intervention, taken from program materials.
- **Target Population** for whom the intervention is intended.
- Delivery either individually or to groups, qualifications needed to deliver the intervention, and training/certification availability/requirements.
- **Descriptive Information** including theoretical basis, content and methods. For the entries in the "Materials and Tools" section, information on formats, content and sample topics is provided.
- Evidence/Citations: This includes information on the research evidence supporting the intervention including designs, population(s), child and parent outcomes, and citations for published studies on children under 3 years. Designs are designated as Experimental (random assignment to intervention and control groups), Quasi-experimental (non-random assignment to intervention and control/comparison groups), and Pre-post (measures taken before and after intervention, no control/comparison group used).

SIMILARITIES AND CONTRASTS AMONG THE INTERVENTIONS

Purpose

All of the interventions aim to impact social emotional development through training, education, and support provided to parents or other primary caregivers. Some of the interventions are preventive in nature while others are intended as intervention/remedial measures for children who are at high risk due to family or environmental factors such as poverty or maltreatment, or due to child factors such as biological risk, developmental disabilities or social-emotional diagnoses. Some state their purpose in very general terms such as "Assist parents in supporting the social and cognitive development of their infants," while others cite specific parent and/or child outcomes such as parenting self-efficacy or child secure attachment.

Target Population

Almost all of the interventions are aimed at families of children at risk for disrupted development. Some are very specifically targeted, e.g. for children in foster care, low birth weight infants, children who have experienced trauma, children with disabilities or children exhibiting challenging behavior. It should be noted that for some programs there are

discrepancies between the target population listed in program materials and the populations that have been used in evaluations of the intervention.

Delivery

The interventions are divided into those delivered primarily in a group format and those that are delivered individually. However several of the individually delivered interventions also include group meetings or have modified versions available in a group format. For example, Clinical Infant Home Visiting routinely includes group meetings, Promoting First Relationships has been used in a group delivery format, and Stepping Stones Triple P can be modified for a combined group and individual delivery. Triple P is available in self-directed, individually delivered, or group formats; it is listed here as an individually delivered intervention since it is the self-directed version that has been evaluated with children less than 3 years old. Two group format interventions are included. The Incredible Years program, while designed for group delivery, has modified formats for including parent-child groups and home visits. Similarly, Circle of Security is intended primarily for group delivery, but program materials state that it can be used as family therapy or in home visitation.

Most of the interventions are designed to be delivered by a variety of professionals in the fields of mental health, health and education. One of the interventions specifies psychotherapists (Child Parent Psychotherapy for Family Violence and Trauma), while another (Activity-Based Intervention: Social Emotional) explicitly states that it is meant for delivery by non-mental health professionals/non-experts.

Training in delivery of the intervention is available for many of the interventions, and for several it is mandatory; a few also require certification.

Theoretical Basis

Most of the interventions claim multiple theoretical bases. Many include behavioral/learning theory or some variant (e.g. cognitive-behavioral theory, social learning theory, operant theory, applied behavior analysis, cognitive social learning theory). Several of the interventions are grounded in attachment theory. Other theoretical sources cited include sociocultural and socialization frameworks, transactional support, social communication, coercion theory, biobehavioral regulation, psychodynamic theory, trauma theory and family systems theory.

Content

Most of the interventions have a somewhat broad focus and share common content. Many include sensitive and responsive interactions between parent and child, behavior management skills, establishing routines, and skills for teaching emotional regulation and social competence. These are all listed in Box

#1 as content having demonstrated associations with positive child social emotional outcomes.

A few of the interventions include more specialized content, often aimed at the needs of specific populations. For example, Child Parent Psychotherapy for Family Violence and Trauma is aimed at children exposed to trauma and includes a focus on trauma. Attachment and Biobehavioral Catch-up is aimed at caregivers of children in foster care and includes an emphasis on providing nurturance when the child "pushes away." Stepping Stones Triple P, for families of children with disabilities, includes content on inclusion, community living, and family supports; protocols for problems such as self-injurious behavior, pica and repetitive behaviors; and strategies such as blocking, physical guidance and functional communication training.

Several of the interventions contain material that is more parent-focused. Promoting First Relationships covers parent sense of self and parent emotional regulation and support; Child Parent Psychotherapy for Family Violence and Trauma deals with parents' experience of trauma; and Circle of Security explores caregiver developmental history and internal models of self and child.

Activity-Based Intervention: Social Emotional Approach is unique in that it provides a systematic framework rather than a content-focused intervention. It describes in detail and provides forms, worksheets, questionnaires, and assessment tools for implementing screening, assessment, goal-setting, intervention and evaluation activities to address social emotional issues in infants, toddlers and preschool children with disabilities. It includes the Social Emotional Assessment Evaluation Measure (SEAM) that provides information for developing functional goals and intervention content.

Methods

The interventions commonly use written materials, discussion, modeling, guided practice and videotaping with feedback as instructional methods. Several of the interventions are more therapeutically oriented and use therapeutic techniques such as empathetic responding, positive regard and reflective dialogue.

Evidence

The currently existing level of evidence for these interventions varies greatly both in the quantity and the methodological rigor of research support. The majority of the interventions have been

evaluated with one or more experimental design studies (Playing and Learning Strategies, Triple-P Stepping Stones, Attachment and Biobehavioral Catch-up, Child Parent Psychotherapy, Incredible Years, Triple P Self-Directed). One of the interventions, Activity-Based Intervention:

Selecting an intervention that has a robust evidence base provides a higher degree of confidence that positive and meaningful outcomes will be obtained.

Social Emotional Approach, is based on content and characteristics that have demonstrated associations with positive outcomes, but has not itself been evaluated. Two have been evaluated with one or more studies using pre-posttest designs (Promoting First Relationships, Circle of Security), one has been evaluated quasi-experimental design studies (Clinical Infant Home Visiting) and one with both quasi-experimental and single subject designs (Family-Guided Routines-Based Approach).

The characteristics of the children participating in studies of these interventions vary. Several interventions have been shown effective with children with disabilities (Promoting First Relationships, Family-Guided Routines—Based Approach, Triple-P Stepping Stones, Incredible Years). Others have been evaluated with children at risk due to a variety of factors such as low income. Still others have been studied with specific populations such as very low birth weight infants (Playing and Learning Strategies), children in homeless families (Promoting First Relationships), children with depressed mothers and from maltreating families (Child Parent Psychotherapy for Family Violence and Trauma) and children in foster care (Attachment and Biobehavioral Catch-up).

Ages of children in the study populations also vary. Some studies used exclusively infants and/or toddlers under their third birthday, while other studies used a range of ages including children older than 3 years, with results reported only for the entire study population, not just those under 3 years.

Many of the program websites listed in the table provide additional research information including research summaries, lists of research publications and links to full research studies.

CONSIDERATIONS IN SELECTING FAMILY-FOCUSED INTERVENTIONS

In selecting an intervention several factors regarding appropriateness and feasibility should be considered. Decision-makers can ask the following questions:

1. How strong is the evidence base for the intervention?

As noted earlier, the amount and rigor of research for the interventions falls along a continuum. Some interventions have been evaluated in multiple experimental design studies, conducted by multiple researchers using multiple

outcome measures and varied populations while others have been studied with only one pre-post design study or have not yet been the subject of published evaluations. Selecting an intervention that has a robust evidence base provides a higher degree of confidence that positive and meaningful outcomes will be obtained.

2. Is the intervention appropriate for the age, developmental level, and special needs of the child?

Interventions typically specify the chronological age range of the children for whom the intervention is appropriate, but do not always discuss developmental age. When selecting interventions for use with children with special needs, developmental age, type of disability, and the child's specific constellation of strengths and challenges should be considered. Examination of the intervention's purposes, content and methods by an early interventionist or other professional familiar with the child and family can provide guidance regarding its appropriateness. In addition, the characteristics of the children for whom the intervention has proven effective can be checked by examining the evaluation and research evidence on the intervention.

3. Does the intervention match the needs, preferences and degree of support needed by the parent(s)?

Parent preferences and needs should always be a primary consideration in selecting family-focused

interventions. Some families may feel their needs can be met by receiving educational materials whereas other families may want and need the more intensive support provided by individually delivered interventions. Still others may want and benefit from the support of other parents that comes with

Parent preferences and needs should always be a primary consideration in selecting family-focused interventions.

group delivered interventions. Some families will have challenges that affect parenting and the ability to make parenting changes such as financial, mental health, and substance abuse issues. Early intervention personnel need to be skilled at identifying family factors that are influencing appropriate parenting and addressing them through direct intervention or referrals to other service agencies. They must also be able to adjust the delivery of parenting interventions to accommodate parent circumstances and capabilities to ensure that parents benefit from the intervention.

4. Is the intervention congruent with the philosophy and goals of the implementing agency?

The theoretical foundations, content, methods and stated purpose of the intervention should be examined to ensure they are compatible with the service philosophy, mission and goals of the agency.

5. Does the agency have the capacity and resources to implement the intervention?

In order to obtain the outcomes documented in evaluation studies, an intervention must be implemented

with fidelity. Critical to implementation fidelity are the types and amounts of supports employed, including materials, training, technical assistance and consultation. The degree of implementation support available varies widely among the programs. For many of the programs, information on the support available can be found on the program websites listed in the Table.

The interventions vary in the personnel and fiscal resources needed for implementation. At one end, very little in the way of staffing capacity is needed to use educational materials which typically are given to parents to use on their own, with perhaps some instructions or explanation from staff and follow-up to see if parents have questions about the content or application of the practices described. At the other end of the continuum, some of the programs require professional staff that have been trained and/or certified in delivering the intervention.

Costs of implementing the interventions entail purchase of materials including leader guides or manuals, curricula and supplementary materials, and

> materials for parents such as books, handouts and DVD's. Agencies must also be able to pay for any training, technical assistance and/or certification required by the intervention developers. Again, specific information on training and certification requirements and cost are available for many of the interventions on the websites listed in the Table.

| Name/Contact Information | Purpose | Target Population | Delivery | Description | Evidence/Citations |
|---|---|--|--|---|--|
| INDIVIDUALLY | INDIVIDUALLY-DELIVERED INTERVENTIONS | TERVENTIONS | | | |
| Activity-Based Intervention: Social Emotional (ABI:SE) Approach Squires & Bricker, 2007 | Assist practitioners and families in creating responsive environments that facilitate the development of social emotional competence in young children by offering a coordinated, comprehensive system that permits early detection of problems and offers early preventative and intervention strategies | • Infants, toddlers & preschool children with identified disabilities or who are at risk for developing socialemotional problems | • Designed to be delivered by non-mental health professionals/ experts such as parents, caregivers, home visitors, early interventionists, teachers and other child care personnel | • Theoretical basis: Transactional and organizational theories of development • Content: Linked systems framework: screening, assessment, goal-setting, intervention, evaluation; goals & interventions are embedded in child-directed, routine & planned activities; uses multiple & varied learning opportunities, and timely & appropriate feedback & consequences; providing safe home & play environment, predictable schedules/routines, and appropriate type & level of activity; responsiveness • Methods: Individual goal-setting and intervention planning, modeling; functional behavioral assessment for children with challenging behavior | No published research |
| Attachment and Biobehavioral Catch-up (ABC) http://icp.psych.udel. edu/index.htm | Enhance emotional and biological regula- tion, and foster secure attachment | • Children 0-5 years in foster care and their caregivers | 10 weekly in-home sessions, 1-hour each Delivered by mental health professionals | Theoretical basis: Attachment theory, biobehavioral regulation Content: Following child's lead, touching & holding child, recognizing & understanding emotions, allowing child to express emotion, responding to child's negative emotion, providing nurturance when child pushes away, conflict resolution Methods: Discussion, practice, videotaping of childparent interaction with feedback | Design: Experimental Population: Infants 3-39 mo. and their foster parents Child Outcomes: Decreased cortisol levels & fewer parent reported behavior problems for toddlers Dozier, et al., 2006 |
| Child Parent Psychotherapy [for Family Violence and Trauma] Also termed http://childtrauma. ucsf.edu Lieberman & Van Horn, 2005; Lieberman, Compton, Van Horn, & Ghosh Ippen, 2003 Materials available in Spanish | Restore child-parent relationship, child's mental health and developmental progression | Children 0-5 years exposed to violence in the home; death of a loved one; or life threatening accidents, illness or disasters—and their families | Weekly sessions for 50 weeks, 1-1.5 hr Conducted in home or clinic Delivered by trained psychotherapists Training available | • Theoretical basis: Attachment theory, psychodynamic theory, developmental theory, trauma theory, social learning theory, cognitive behavioral theory • Content: Dyadic attachment based intervention with focus on safety, affective regulation, child-caregiver relationship, normalization of trauma related response & joint construction of a trauma narrative, foster pro-social adaptive behavior, promote development of a daily predictable routine • Methods: Joint observation of infant, empathetic responding and unfailing positive regard by therapist, exploration of mother's childhood experiences | Design: Experimental Population: Depressed mothers, anxiously attached infants, infants from maltreating families Child Outcomes: Increased secure attachment; decreased disorganized attachment, avoidant, resistant & angry behavior Parent Outcomes: Increased empathy and interactiveness with child Cicchetti, Toth, & Rogosch, 1999; Cicchetti, Rogosch, & Toth, 2006; Lieberman, Weston, & Pawl, 1991 |

| Name/Contact Information | Purpose | Target Population | Delivery | Description | Evidence/Citations |
|---|---|--|--|--|---|
| Clinical Infant Home Visiting Lyons-Ruth, Botein, & Grunebaum, 1984 | Assist parents in supporting the social and cognitive development of their infants | Mother-infant pairs at high risk | Weekly home visits and group meetings over 9-18 months Delivered by trained professionals and paraprofessionals | Theoretical basis: Attachment theory, psychodynamic theory Content: Positive, developmentally appropriate parent-child interactions, appropriate toy play, family competence in accessing resources to meet basic needs, mother's role as teacher and source of emotional security, decreasing social isolation Methods: Provide an accepting & trustworthy relationship, modeling, positive interactions, demonstration of toy activities, group meetings, drop-in social hours | Design: Quasi-experimental Population: Infants from high risk families Child Outcomes: Increased secure attachment and mental development; decreased disorganized attachment At follow-up, ages 5 & 7 yrs: Decreased teacher-rated hostile behavior problems & increased parent-reported positive play Lyons-Ruth, Connell, Grunebaum, & Botein, 1990; Lyons-Ruth & Eserbrooks, 2006; Lyons-Ruth, & Melnick, 2004 |
| Family-Guided Routines-Based Approach http://fgrbi.fsu.edu | Promote developmental outcomes for young children at risk or with identified disabilities through working with family members and caregivers in home and community settings | • Infants and toddlers at risk or with identified disabilities, including ASD, and their families | Weekly home visits, typically over 9 months Delivered by early interventionists | • Theoretical basis: Cognitive-behavioral theory, social communication theory, transactional support • Content: Identifying & establishing routines, contextual support, balanced turn-taking, descriptive talking, modeling, natural reinforcement, environmental arrangement, waiting, contingent imitation, modeling, requesting imitation, expand-recast, prompting/fading. • Methods: Individualized planning, written handouts, video examples, modeling, guided practice, videotaping with review and feedback, problem-solving & planning | Design: Quasi-experimental, single-subject Population: Children 2 yrs old with ASD, 1-& 2-yrs old with developmental delay or expressive language delay. Child Outcomes: Increased social communication including joint attention, social interaction, behavior regulation & rate of communicating; and social skills Parent Outcomes: Increased use of praise, modeling, imitation, choice, expansion & open-ended questions Wetherby & Woods, 2006; Woods, Kashinath, & Goldstein, 2004 |
| Playing and Learning Strategies (PALS) www.childrenslearninginstitute. orgour-programs/program- overviews/PALS/ldcfaudt.html Curricula available in Spanish | Preventive intervention to strengthen bond between parent and child and stimulate early language, cognitive, and social-emotional development | • Infants & toddlers birth to 3 years and their families, including premature infants and high risk families • PALS Infant Curriculum (for ~5-12 mo.): 10 sessions • PALS Toddler Curriculum (for ~18-36 mo.): 12 sessions | 10-12 weekly home visits Adapted for delivery to rural families through the Internet (Baggett, Davis, et al., 2010) Delivered by a professional who work with families Training and Certification required | • Theoretical basis: Attachment theory, sociocultural and socialization frameworks • Content: Attending to communicative signals, responding appropriately to children's positive & negative signals, supporting child learning by maintaining their interest & attention rather than redirecting or over stimulating, introducing toys & activities, stimulating language development through labeling & scaffolding, encouraging cooperation, responding to misbehavior, incorporating strategies throughout day & into routines • Methods: Direct teaching, demonstration videos & guided practice, video-taped practice sessions with review & feedback, planning for integrating skills into daily activities | Design: Experimental Population: Very low birth weight and term infants 6-10 mo & toddlers 24-28 mo, infants 3-5 mo from at risk families, infants 3-8 mo in low-income families Child Outcomes: Increased social, emotional, communicative & cognitive competence Parent Outcomes: Increased maternal responsiveness; decreased negative affect Akai, Guttentag, Baggett, Willard, Noria & The Centers for the Prevention of Child Neglect, 2008; Baggett, Davis, et al., 2010; Landry, Smith & Gutentag, 2008; Landry, Swank, & Gutentag, 2008; Smith, Landry, & Swank, 2005 |

| Name/Contact Information | Purpose | Target Population | Delivery | | Evidence/Citations |
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| Promoting First Relationships (PFR) www.pfrprogram.org and http://ncast.org available in Spanish | Assist parents and other caregivers to provide sensitive and responsive caregiving that can result in mutually satisfying caregiver-child relationships, promote trust and security in infancy and healthy identity formation during toddlerhood | • Caregivers of children birth to 3 years, including high risk & special needs populations | sessions Delivered by professionals working with caregivers of young children birth to 3 years Training available Has also been used in a group format | • Ineoretical basis: Early relationship sensitivity, attachment theory • Content: Consultation strategies for promoting healthy caregiver-child relationships, social-emotional needs of infant-toddlers, caregiving qualities & activities to promote security, trust & emotional regulation in infancy (individual attention, empathy, labeling & organizing feelings, predictability), activities to promote healthy identity formation & social competence in toddlers (managing feelings of distress, rituals & routines, encouraging exploration, independence, cooperation, and limits), intervening with challenging behavior, exploring parents sense of self, emotional regulation & support • Methods: Handouts & written materials, individualized videotaped feedback, coaching & guided practice | Design: Pre-post Population: Infants & toddlers with disabilities, from homeless families, from low income families Child Outcomes: Increased child responsiveness & contingent behavior in interactions, social competence and attachment security Parent Outcomes: Increased sensitivity and responsiveness in interactions; decreased depression Kelly & Spieker, 2008; Kelly, Zuckerman, & Rosenblatt, 2008; Maher, Kelly, & Scarpa, 2008 |
| Friple P - Self-Directed www.TripleP-America.org Markie-Dadds, 1999; Sanders, & Turner, 1999; Sanders, Lynch, & Markie-Dadds, 1994 | Prevent severe behavioral, emotional and developmental problems in children by enhancing the knowledge, skills and confidence of parents | • Parents of children birth to 12 years at high risk and/ or with behavior problems | Book and work- book materials completed over 10-17 weeks, with or without tele- phone consultation Individual and group formats also avail- able, delivered by professionals, with training required | • Theoretical basis: Social learning theory, operant theory, coercion theory and applied behavior analysis • Content: 17 core parenting skills to increase pro-social child behaviors and decrease problem behaviors (e.g. quality time, praise, attention, incidental teaching, behavior charts, setting rules, planned ignoring, instruction-giving, logical consequences, quiet time, time out) • Strategies for generalization and maintenance • Methods: Workbook with readings, activities, exercises and homework tasks | Design: Experimental Population: Children 18-36 mo olds at risk, 2-5 yrs old at risk Child Outcomes: Decreased behavior problems Parent Outcomes: Increased parenting competence and confidence; decreased anger and use of negative discipline strategies Markie-Dadds & Sanders, 2006; Morawska & Sanders, 2006 |
| Triple P - Stepping Stones www.TripleP-America.org Materials available in Spanish | Help families achieve durable improvements in children's behavior and lifestyle and in the quality of family life | • Families of children birth to 12 years with a disability | 10 sessions individually tailored to family needs Individual delivery or combined group and individual delivery Delivered by a variety of health, education and welfare professionals who counsel parents Training required | • Theoretical basis: Social learning theory, operant theory, coercion theory and applied behavior analysis • Content: Standard Triple P content plus issues such as adjustment to having a child with a disability, increased care giving, inclusion and community living, family supports; covers additional causal factors for behavior problems such as communication difficulties; provides behavior protocols for common problems associated with disability such as self-injurious behavior, pica, repetitive behaviors; covers additional strategies such as blocking, physical guidance and functional communication training • Methods: Didactic presentations, modeling, roleplay and feedback, homework, workbook, video demonstrations | Design: Experimental Population: Children 2-9 yrs with developmental delay or ASD Child Outcomes: Decreased behavior problems and oppositional behavior Parent Outcomes: Increased parenting style including decreased laxness, over-reactivity & verbosity; decreased maternal stress Roberts, Mazzucchelli, Studman, & Sanders, 2006; Whittingham, Sofronoff, Sheffield, & Sanders, 2009 |

| Name/Contact Information | Purpose | Target Population | Delivery | Description | Evidence/Citations |
|---|---|--|--|--|--|
| GROUP-BASED | GROUP-BASED INTERVENTIONS | Sh | | | |
| Circle of Security http://www. circleofsecurity.org | Promote secure attachment in high risk populations through parent education and psychotherapy | At-risk toddlers and preschool age children and their parents | For use in group settings (20 weekly meetings, 75 minutes each) as family therapy or in home visitation Training and certi- fication required | • Theoretical basis: Attachment theory, family systems theory, object relations theory • Content: Individualized treatment plans based on caregiver-child interactions and child attachment classification, caregiver developmental history and internal models of self and child, identification of a key issue as focus of therapeutic work; observational skills, sensitivity and appropriate responding, recognizing and understanding child's cues, reflective functioning and dialogue, engaging with child in regulation of their emotions, empathy • Methods: Educational and therapeutic techniques, video review and reflective dialogue | Design: Pre-post Population: Low income toddler & preschool children Child Outcomes: Increased secure attachment; decreased insecure attachment Hoffman, Marvin, Cooper, & Powell 2006 |
| Incredible Years Parent Training www.incredibleyears.com Parent handouts available in Spanish and several other languages | Increase parenting self-efficacy and competencies, reduce parenting stress and promote more positive parent-child interactions in order to promote children's social, emotional and behavioral competencies and avert ongoing patterns of negative child behavior | Parents of children 0-6 years Other versions available: Incredible Years Program (0-12 months) Incredible Years Parents and Toddlers Program (1-3 years) For children with developmental disabilities (McIntyre 2008a) | 12-14 weekly 2-2 ½ hour sessions Modified formats include parentchild groups and home visits Delivered by counselors, psychologists, nurses, social workers, family therapists or other mental health professionals Training not required, but available and recommended Certification | Theoretical basis: Cognitive social learning theory Content: Parenting skills including child-directed play skills, empathy, using praise and encouragement, social/emotional coaching, teaching self-regulation and peer play skills, routines and schedules, limit-serting and nonviolent discipline techniques Methods: Facilitator-lead discussion of video vignettes, practice activities, home activity plans | Design: Experimental Population: 2-5 yr olds including children from low income families, with developmental disabilities or ASD, children receiving Part C or Part B services Child Outcomes: Increased independent play; decreased behavior problems Parent Outcomes: Increased use of positive parenting skills, self-efficacy, quality of mother-child interactions; decreased maternal stress, coercive discipline and use of corporal punishment Brotman, Klein, Kamboukos, Brown, Coard, & Sosinsky, 2003; Gross, Fogg, & Tucker, 1995; Gross, Fogg Webster-Stratton, et al., 2003; Gross, Garvey, et al., 2009; McIntyre 2008a & b; Tucker, Gross, Fogg, Delaney, & Lapporte, 1998 |

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