Parenting Programs in Shelby County, Tennessee

A Brief Review of the Research Literature

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Key findings

- Programs that serve parents of young children aim to improve parenting practices and positively influence child development.
- Programs have multiple delivery formats and seek to serve families with various risk factors, including those with children who have special needs.
- Several research-based parenting programs with varying levels of effectiveness currently operate in Shelby County, Tennessee, and serve thousands of children and their parents.
- Programs operating in Shelby County have been rigorously evaluated (either in Shelby County or other locations), and the results indicate that these programs can produce positive short- and long-term effects on children and their parents, particularly in the areas of increased home environment quality and positive child development.

The home is likely the most influential environment in a child's life. Positive parenting practices, such as being emotionally supportive and providing a stimulating learning environment with language-rich interactions and opportunities to explore and discover, have immediate and lasting effects on children's academic and social and emotional development.[1] Because of the importance of the home environment, many national and local programs and organizations work to provide support services to parents to increase their knowledge of child development and empower them to provide emotionally supportive and cognitively stimulating environments.

One such organization, the Urban Child Institute (UCI), is focused on promoting the healthy development and well-being of young children in Memphis and Shelby County, Tennessee. A key aim of UCI is to provide research-based information to the Shelby County community to promote parents' knowledge and use of positive parenting practices and to encourage the community to support research-based parenting programs that are likely to achieve positive child and parent outcomes. UCI is especially interested in promoting effective parenting practices to foster social and emotional growth in children. As a central community partner in early childhood issues, UCI aims to provide information about what works and what needs to be learned in order to encourage and support effective programs and practices.[2]

PURPOSE

To support this effort, UCI commissioned the RAND Corporation to conduct a review of the relevant research literature on programs currently operating in Shelby County that include a focus on parenting practices and serve parents with young children.[3] The task was not to identify the known universe of parenting programs supported by rigorous evaluations. Rather, it was to identify those programs currently active in Shelby County for which such evaluations exist. We examine evaluation studies of parenting programs

operating in Shelby County that include a significant parenting practice component (for parents or legal guardians with children ages birth to five)[4] and discuss the evaluation evidence related to parent and child outcomes. Based on our broad review of this research, we provide guidance for UCI and other organizations in the county about the evidence supporting existing programs and areas where further research is needed. Additionally, we provide recommendations for how UCI, as a community partner, can support connections between parents and programs that foster positive parenting practices for young children.

To accomplish this goal, we draw on national, state, and local research on parenting programs that focus on positive parenting practices and serve parents with young children (birth to age five). We address the overarching question of **what outcomes are associated with previously evaluated parenting programs currently operating in Shelby County, Tennessee.** To acquaint the reader with the full range of programs, we first define what we mean by *parenting programs* and the methods used to identify evaluated programs in Shelby County. Then, we describe the evaluation evidence for programs operating in Shelby County for parents of young children and the outcomes associated with those programs. We conclude with a summary and recommendations for UCI and the community.

DEFINING PARENTING PROGRAMS

Children whose parents offer an emotionally supportive and cognitively stimulating environment display better social and emotional adjustment and academic skills in early childhood, lasting into their later elementary school years, than children whose parents do not provide a supportive and stimulating environment.[5] To help foster such a high-quality home environment and parenting practices, programs for parents with young children work to equip parents with the skills and knowledge necessary to positively support their children's development.

Exact definitions of parenting programs, including programs focused on parent training and education, differ depending on the goal of the program, delivery mode, and populations served. **Definitions of parenting programs commonly include language about assisting parents to communicate about and understand their child's behavior; providing knowledge about appropriate parenting practices, including ways to interact with their child; and supplying parents with the skills and resources necessary to implement these practices.**[6] Programs focused on providing information and support to improve parent-child interactions encompass a wide array of delivery models and target diverse audiences. For example, early care and education (ECE) programs, such as preschool, can provide parents with opportunities to participate in classroom activities, chaperone a field trip, or volunteer, which engages parents in their children's early learning. This type of parent participation is commonly referred to as *parent involvement*.[7] Other strategies, such as home visiting interventions or parent education groups, focus more directly on changing parenting practices and include individualized support, such as providing information and coaching regarding developmentally appropriate interactions with children and referrals to community services for parents. Programs with a focus on improving parenting practices can be intensive, providing parents with multiple services and many hours of programming, or can be less intensive and require very little time commitment from parents. For example, a nonintensive program might simply provide parents with written materials that encourage positive parenting practices and offer information about child development.

Populations targeted by programs also vary. Some programs, such as Head Start and Early Head Start, two national programs, focus on serving low-income families regardless of any other family or child characteristics. Other programs specialize in providing parenting services and supports to parents with children with special needs, such as behavioral challenges.[8] Programs can also focus on parents with specific traits, including being a first-time or single parent.[9]

In addition, programs for parents can focus on affecting various elements of parenting practices or the home environment. Programs might target one dimension, such as reading, providing information on the importance of reading and suggesting ways for parents to engage with their children during reading time. Other programs are broad and focus on many dimensions of parenting, such as home safety practices, the importance of emotionally supportive parent-child interactions, developmentally appropriate academic activities that parents can participate in with their children, and methods for handling behavioral problems.

Numerous large-scale reviews of the literature and meta-analyses detail family and child outcomes associated with participation in these programs.[10] Participation in programs for parents with young children can be associated with improved parenting practices, such as increased time spent reading, language development, warm and sensitive caregiving, and less harsh punishment strategies, depending on the program model

and focus.[11] One type of program that provides parents with child development knowledge and models positive parenting practices is **home-visiting interventions**.[12] These interventions typically involve a child-developmental expert or other professional (e.g., nurse) conducting home visits with first-time or low-income families at multiple times during the early years of children's lives. Various home-visiting interventions have different foci or cater to diverse audiences. **Center-based ECE programs** can also offer services to parents to support them in strengthening their parenting practices. These programs can foster an environment for parents and guardians to be involved in their children's early learning.[13] For example, centers can offer parenting classes, support groups, family goal-setting sessions, and home visits to families. As with home-visiting programs, not all programs affect multiple domains of parenting behaviors and skills. Other programs serving diverse populations, including low-income parents, seek to engage parents in children's learning through **lighter-touch interventions** that are not as time or resource intensive.

In this report, we focus on programs specializing in improving parent-child interactions, currently operating in Shelby County, and serving parents with young children (birth to age five). The review includes home-visiting interventions, ECE center-based programs, and lighter-touch interventions that are implemented in pediatric offices or other locations.

EVALUATION STRATEGIES

To understand which parenting programs are effective at achieving program goals, a rigorous evaluation is necessary to isolate the effects of the program on family or child outcomes from other factors that might also relate to outcomes.[14] For example, parents might end a program period with increased positive parenting behaviors. However, without an evaluation, program operators and other decisionmakers do not know whether the changes were a result of the program or would have occurred in the absence of the program. To avoid falsely claiming that a program resulted in a specific positive parent or child outcome, decisionmakers want to compare the results for program participants with those of a similar group of families or children who did not receive the program's services. This design allows the evaluation to determine whether outcomes in the study group can be reasonably attributed to participating in the program. The ultimate aim of a rigorous evaluation is to answer the question, "Did it work?" However, to answer this question,

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it is necessary to first answer the question, "Compared with what?" Thus, the selection of an appropriate comparison group against which we can measure program effects is a critical consideration.

The strongest comparison-group design comes from a randomized experiment in which some members of a group are randomly selected to receive the program and other members of the group are assigned to a comparison or control condition (i.e., a randomized controlled trial [RCT]). In this design, parents who were equally motivated to apply for the program were assigned to the program on the basis of a coin flip, in essence, so that the only difference between those in the program and those not was chance. Using this comparison-group design answers the question, all else being equal, "What would happen to the program participant if she or he had not had the opportunity to participate?" However, conducting an RCT is not always practical or ethical, so other forms of comparison groups must be considered.[15]

There are several quasi-experimental methods that allow one to select a comparison group that is closely matched to the program participants in the absence of randomization. Though not as strong as an RCT, several designs can produce sound findings through the use of appropriate statistical techniques. In these designs, families in the comparison groups are not denied program access; rather, the study circumstances create a situation where the families do not participate, and these families can be used as a comparison group. Examples include a child just missing a cutoff criterion of a given birth date or a standardized risk-assessment score for program selection, families or children who were living in a program area in the year before the program was offered so are not eligible, a family being placed on a wait list for an oversubscribed program, and a family living in a neighboring community that does not offer the program's services. These design methods use statistical approaches to approximate as best as possible a randomized approach to account for the characteristics that affect

the reasons parents or children are selected into a program. This then creates a matched comparison group with similar characteristics to the group receiving the program services. This design produces estimates of program effects that are not influenced by parent or child characteristics that might affect outcomes in the absence of the program. These families are a good comparison to the program group because their exclusion from the program does not depend on parents' actions. When participating or not participating in a program depends on a family's choices, the outcomes found for the program might be confused by other factors, such as motivated parents and good parenting behaviors.

The lack of a comparison group in evaluation design will produce results that decisionmakers will be less likely to accept as true program effects. For instance, if a parenting program measures children's behavioral outcomes at the beginning and end of the program period (*pre-post*), there is no certainty that any changes over time were a result of the program; they might have naturally occurred (e.g., because the child has matured). Moreover, the comparison group has to be appropriate. Comparing children in a Shelby County program group to a Tennessee or national outcome average without adjusting statistically for differences leaves open the possibility that the Shelby County program participants might not have been sufficiently comparable to the state or national group without the program. A well-designed comparison group is necessary to compare results of program participants with what we would reasonably expect to happen in the absence of the program.

METHODS

We highlight programs currently operating in Shelby County that have undergone formal evaluations—either in Shelby County or through national evaluations—for which there are published research reports. Programs included in this section are a subset of the universe of parenting programs in Shelby County identified by UCI, through a community scan, in the spring and summer of 2015. UCI conducted the scan by first examining published documents from local universities and early learning networks that included lists of parent-education or parent-engagement programs operating in the county. Additionally, UCI staff performed Internet searches to capture any programs for parents that were not listed on the published documents. The main criterion used by UCI to identify programs was that they must serve parents with young children (birth to age five), regardless of target population, mode of delivery, program intensity, or other characteristics.

Out of the 39 programs included in the original scan, RAND researchers identified seven programs for which there was a focus on parent-child interactions; a rigorous evaluation (i.e., RCT or quasi-experimental designs); and a published, public research report describing the methods used and the program's effects on parenting or child outcomes. Programs meeting these criteria included

- Early Head Start
- Head Start
- Healthy Families America
- Nurse-Family Partnership
- Parent-Child Interaction Therapy
- Parents as Teachers
- Reach Out and Read.

All of these are established programs that also operate outside Shelby County. The other 32 programs included on the UCI list did not meet these criteria. However, it is important to note that this list of seven programs might not be exhaustive. At the time of the scan, there might have been other programs in the county that were not captured because they were not in operation during the period the scan was conducted, an evaluation of the program was not publicly available, or information about the evaluation was not readily accessible. Also, additional parenting programs may be operating in the county that were not included because they did not meet the criterion of serving parents of young children (birth to age five), with a focus on parent-child interactions and child development.

In the following section, we describe the seven programs that have been formally evaluated, including their modes of delivery (e.g., home-based or center-based), the ages of children served, and program results.

RIGOROUSLY EVALUATED PARENTING PROGRAMS IN SHELBY COUNTY

In this section, we describe the seven parenting programs identified from the UCI list that have undergone a rigorous evaluation, with the goal of indicating what types of outcomes are associated with these programs. We anticipate that local Shelby County organizations interested in improving parenting and childhood outcomes can use this information to support the

programs most likely to achieve outcomes of particular interest or to provide information about such programs to parents, organizations engaging parents of young children, or policymakers.

Early Head Start

Early Head Start, established in 1994, is a federally funded program designed to serve low-income infants and toddlers, up to age three, and their families, as well as pregnant women. The program focuses on early childhood development, family engagement, and community building. Like Head Start, Early Head Start is governed by the Head Start Program Performance Standards, which are described in the section about Head Start. Early Head Start programs also provide services to pregnant women, including assistance accessing comprehensive prenatal and postpartum care.[16] Programs may be home-based, center-based, or a combination of the two (a mixed approach). In Shelby County, the grantee for Early Head Start is Porter-Leath Children's Bureau.[17] In 2014–2015, the program had funding to provide services for 24 pregnant women and center-based, full-day (five days a week and more than six hours a day) early childhood education slots for 120 children.[18]

Outcomes Associated with Early Head Start

The Early Head Start program has been evaluated through a federally funded RCT study involving approximately 3,000 children. Data collection for this impact study began in 1996 and occurred at 17 sites nationwide that offered center-based, home-based, or mixed-approach programs. The study assessed child and family outcomes when children were ages two, three, and five.[19] Outcomes listed below are derived from the impact study.

Results suggest that the Early Head Start program did have an initial, positive effect on several aspects of parenting practices. As measured when children were two and three years old, Early Head Start parents were more supportive in the language development of their children, were more likely to read daily to their children, initiated more teaching activities, were more supportive during play, and were more likely to set a regular bedtime at age two than parents in the control group.[20] Early Head Start parents were also less likely to report spanking their child than control-group parents.[21] By age five, some of these initial differences no longer existed. Early Head Start parents were not significantly different from control parents in the support they provided either for their children's language development or during play with their children. The significant differences in the report of child spanking had also disappeared. However, by age five, mothers in the Early Head Start group reported lower depression scores and were less likely than members of the control group to live with someone with an alcohol or drug problem.[22]

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In regard to child outcomes, Early Head Start had a range of positive, if modest, effects on several developmental domains. In general, these effects diminished over time, though not all disappeared. As measured at ages two and three and compared with control-group children, Early Head Start children showed less aggressive behavior and were more engaged in play.[23] Children whose families were enrolled in the program also scored higher on vocabulary tests and higher on a mental development index than control-group children.[24] By age five, differences in vocabulary and achievement had disappeared. However, children in the Early Head Start group showed more positive approaches to learning and fewer social behavior problems than children in the control group at this age. There were no significant differences between the two groups on emotional regulation at any age. Early Head Start meets the criteria to be listed in the U.S. Department of Health and Human Services Home Visiting Evidence of Effectiveness (HomVEE) registry. The HomVEE registry compiles evidence on home-visiting programs and determines whether programs have high- or moderate-quality impact studies that demonstrate positive effects on children or families.

Head Start

Launched in 1965, Head Start is a federally funded program serving low-income children, ages three to five, and their families. Head Start programs must provide comprehensive child-development services, child care, case management, health care and referrals, parenting education, and family support. Central to parent engagement or involvement is the development of

a family partnership agreement that includes family goals, responsibilities, and timetables and strategies for achieving goals. In addition, programs must provide parents and families with

- information about and access to community services and resources
- parent-involvement opportunities and education activities
- opportunities to assist in the development of the program's curriculum and to volunteer at their children's centers
- opportunities to enhance their parenting skills, knowledge of, and understanding of the educational and developmental needs and activities of their children
- an environment in which they can share concerns about their children with program staff
- opportunities to participate in family literacy services and health education programs.[25]

Head Start is primarily center-based, though some components may be delivered in the home. In Shelby County, the Shelby County Board of Education is the grantee for Head Start funding and, according to the 2014–2015 snapshot, has funding for 3,812 slots—all of which are center-based.[26]

Outcomes Associated with Head Start

In the early 2000s, Head Start underwent a rigorous national evaluation, known as the Head Start Impact Study (HSIS). The HSIS was an RCT of approximately 5,000 three- and four-year-old children and their families who applied to Head Start for the first time in the fall of 2002. Families in the treatment group were offered enrollment in Head Start programs involved in the study; control-group families were not granted access to these programs, though they might have received similar services through other programs. Data collection occurred at several points, beginning with the completion of the child's first year of Head Start and through the child's completion of third grade. The study enrolled three- and four-year-olds, and results for these cohorts were analyzed both separately and combined.[27] Unless otherwise noted, findings for Head Start come from the HSIS.

Outcomes for parents whose children were enrolled in Head Start were mixed. One study used HSIS data to examine parental investment in their children both during and after Head Start enrollment. Parental investment was measured by a composite of 65 measures, including such items as time spent reading with the child and setting a regular bedtime for the child. During the period of enrollment, parents in the Head Start group showed an increase in parent investment in children as compared with parents in the control group. After preschool enrollment ended, this effect diminished, but Head Start parents still displayed more parental involvement than parents in the control group.[28]

The long-term impact of Head Start on parental investment once children reached third grade is less clear. Only one parental outcome per age cohort was significantly different between the Head Start and control-group parents. For children in the four-year-old cohort, parents reported significantly greater time spent reading to their children, and for children in the three-year-old cohort, significantly more parents in the Head Start group reported use of an authoritative parenting style (high control and high warmth). No other significant effects on any parental outcomes were found.[29]

Outcomes for children are similarly varied. When looking across findings from the HSIS, there are very few differences between children in the Head Start and control groups on academic performance, social and emotional outcomes, and health status by the time children completed the third grade. The study did find some significant differences on some individual outcomes between the Head Start and control groups heading into kindergarten. However, by first and third grades, those effects largely disappeared.[30] In contrast, two quasi-experimental studies that used data from national surveys—the National Educational Longitudinal Study (NELS) and the National Longitudinal Survey of Youth (NLSY)—found some long-lasting benefits of the program. In the NELS study, children in the Head Start group experienced significantly less mortality from causes plausibly affected by Head Start than children in the control group. Children enrolled in Head Start also had higher levels of high school completion and college attendance than those not exposed to Head Start.[31] In the NLSY study, Head Start children scored significantly higher on math and reading tests through age ten compared with their siblings who were not enrolled in Head Start. Children in Head Start also had significantly better scores on a composite of young adult outcomes (high school graduation, at least one year of college attempted, idleness, criminal activity, teen parenthood, and poor health).[32] It is important to note that differences in program effects for some groups were seen across the studies. Some sources of variation include what services the program offered and demographics, such as the child's race, socioeconomic status, and language spoken at home.

Healthy Families America

Healthy Families America (HFA) is a home-visiting program that specifically targets families with particular risk factors, including single parenthood, low income, childhood history of abuse, substance abuse, mental health issues, or domestic violence.[33] Families are typically identified for the program prenatally or within three months of birth and provided weekly home visits until the child is six to nine months old. Home visiting continues until the child is three to five years old, depending on the particular program model. All HFA programs include screenings to determine risk for child maltreatment and other adverse childhood experiences, as well as routine screenings for child development and maternal depression. Local sites choosing to implement HFA have flexibility in what services they provide in the home-visiting component of the program, but in general they include referrals to community resources, information on developmental milestones, modeling of positive parent-child interactions, and supporting parents in crises. Many HFA programs also use an Individual Family Support Plan (ISP) that promotes family goal-setting and problem-solving.[34] HFA aims to reduce child maltreatment and improve children's social-emotional well-being, health, school readiness, and access to community services. Through grants from the Tennessee Department of Health and Department of Children's Services, LeBonheur Children's Hospital offers HFA as part of its community programming. No information is publicly available on the number of families served.

Outcomes Associated with Healthy Families America

There is limited evidence that HFA fosters positive parenting practices. A comprehensive review of 33 HFA evaluations between 1992 and 2007, including eight RCT studies, documented positive effects on parenting attitudes and the home environment.[35] The same review, however, found HFA's effects on parent-child interaction and maternal life course outcomes to be mixed.

The HomVEE registry rated 19 studies of HFA programs, which had results published in peer-reviewed reports or articles, to be of moderate- or high-quality design.[36] These evaluations all used an RCT study design and were conducted at HFA sites in Alaska, Arizona, Hawaii, New York, and California. Below we summarize results by site location because specific HFA program components vary by site, and the Shelby County community can consider these results in the context of program implementation and targeted populations that most closely match the Memphis HFA model.

The Healthy Families Alaska program enrolled mothers during pregnancy or just after giving birth. Families in the program were to receive weekly home visits until they functioned sufficiently to graduate or until their children turned two, although in reality visits occurred less frequently. The program emphasized the development and use of an ISP to set family goals and monitor progress. The evaluation of the program found no significant differences between HFA and control families on most parenting outcomes, including parenting knowledge, parenting attitudes, parental satisfaction, and parent-child interaction.[37] HFA mothers did report significantly better self-efficacy than control mothers, and HFA families were significantly less likely to have a poor total score on a measure of the home learning environment. In terms of discipline tactics and child abuse and neglect, there was no overall program effect on reports of child maltreatment. However, HFA mothers reported using less severe forms of physical discipline less often than control mothers. The two groups were similar in their use of more-severe forms of physical discipline.[38]

The Healthy Families Arizona program followed a similar model, with parents enrolling during pregnancy or just after birth. Home visitors provided emotional support and information to parents, modeled parenting behavior, and addressed substance abuse and mental health issues. The evaluation of the Healthy Families Arizona program found that parents enrolled in HFA were less likely to use certain kinds of abusive discipline behaviors than comparison families; however, the program did not show significant differences on parental report of family violence between HFA and control groups.[39] With regard to parental attitudes and behaviors, there were no significant differences between HFA and the control group, with the exception that HFA parents showed less inappropriate expectations of children when measured at age six months. A key component of the HFA program is provision of support and referrals, and HFA families did report using significantly more resources than control families. Significantly fewer HFA parents reported alcohol use, and significantly more HFA parents reported being enrolled in school or training.[40]

The Healthy Families Hawaii program was designed to provide three to five years of home visiting to enrolled families, with visits occurring weekly for most of the child's first year and gradually decreasing in frequency. In practice, visits happened with much less frequency, with families receiving an average of 13 visits in the first year. Home visitors focused on

helping families develop problem-solving skills, connect with needed services, and develop an ISP. The evaluation of the Hawaii program found that HFA mothers and control mothers did not differ significantly in their use of nonviolent discipline, though HFA mothers were less likely to threaten to spank their children.[41] There were no differences between HFA and control groups on self-report of abuse or neglect or substantiated reports of abuse or neglect.

The New York Healthy Families program also aimed for weekly visits during the child's first year; families received an average of 22 visits during their first year enrolled. Like other HFA programs, home visitors offered a variety of parental support services and encouraged the use of an ISP to set and monitor goals. The New York evaluation found that HFA mothers reported committing serious physical abuse less frequently than mothers in the control group and reported more-frequent use of nonviolent discipline.[42] There were no differences between HFA and the control group on substantiated reports of physical abuse or neglect.

HFA has been shown to have some positive effects on child outcomes, though results are mixed. The Alaska evaluation found that HFA children had better developmental and behavioral outcomes than control children, and significantly more often HFA children scored within the normal range for internalizing and externalizing behaviors, compared with control children.[43] The Hawaii study found no differences between HFA and control groups on tests of cognitive development. The New York study found that HFA children scored higher on developmental and social and emotional screeners than control children, though this effect was only seen for boys.[44] Overall, findings for both parents and children are quite varied. This lack of consistency is likely because of the great flexibility individual programs have in implementing HFA.

Nurse-Family Partnership

The Nurse-Family Partnership provides home visits by a registered nurse to first-time, low-income mothers from pregnancy until the child is two. These home visits occur approximately once a month and are designed to teach mothers about positive health behaviors, child development and appropriate care, and maternal life course development (family planning, participation in the workforce, education, etc.). Currently, Le Bonheur Children's Hospital offers the Nurse-Family Partnership home-visiting program.[45] No information is publicly available on the number of families served.

Outcomes Associated with Nurse-Family Partnership

The program has undergone three large-scale RCTs carried out in Elmira, New York; Memphis, Tennessee; and Denver, Colorado. The Memphis study consisted of 743 families; 85 percent had incomes below the poverty line, and 92 percent were African American.[46] Families were enrolled in the study between 1990 and 1991, and outcomes were assessed at several points through the child's 12th birthday. Findings from the Memphis study are presented below.

Over the course of the 12-year follow-up, the study found several positive effects of Nurse-Family Partnership participation on maternal life course. However, for some key outcomes—such as maternal education and employment—Nurse-Family Partnership did not appear to have any effect. As assessed when the children were age two, and compared with women in the control group, fewer women in the Nurse-Family Partnership group had pregnancy-induced hypertension or second pregnancies.[47] As assessed when children were six years old and compared with women in the control group, women in the Nurse-Family Partnership group had fewer subsequent pregnancies and births, longer intervals between the births of their first and second children, and longer relationships with their current partners (54 versus 45 months).[48] Also, families in the program used fewer months of government assistance and food stamps in the previous 18 months.

As assessed when the children were 12 years old and compared with the control group, mothers in the Nurse-Family Partnership group reported longer relationships with their partner and greater sense of control over important things in their lives. During the 12-year follow-up period, the government spent less per year on food stamps, Medicaid, and Aid to Families with Dependent Children and Temporary Assistance for Needy Families (TANF) for Nurse-Family Partnership families than control families.[49] No statistically significant program effects were found on mothers' education, employment, marriage, and partnership with the fathers of the children at any point.

Similar to maternal outcomes, the Memphis trial of Nurse-Family Partnership found several positive impacts for children enrolled in the program. As measured at age two, children in the Nurse-Family Partnership group had fewer hospitalizations detecting injuries or accidental ingestions and fewer days hospitalized with injuries or ingestions compared with children in the control group. There were no significant program effects on preterm delivery and low birth weight, children's immunization rates, mental development, or behavioral problems.[50] As

measured at age six and compared with children in the control group, children in the Nurse-Family Partnership group were more likely to have been enrolled in formal out-of-home care between ages two and four and a half and had higher scores on tests of intellectual functioning and tests of receptive language. Nurse-Family Partnership mothers also reported fewer child behavior problems in the borderline or clinical range.[51]

At age 12, children in the Nurse-Family Partnership group were less likely to have used tobacco, alcohol, or marijuana in the past 30 days than children in the control group. For those who did report using these substances, children in the Nurse-Family Partnership group reported using fewer of these substances and using for fewer days in the 30 days prior.[52] Nurse-Family Partnership children also reported fewer internalizing disorders. The program did not, however, appear to have significant impacts on child academic achievement or child behavior problems over the course of the 12-year follow-up. Nurse-Family Partnership meets the criteria to be listed in the HomVEE registry.

Parent-Child Interaction Therapy

Parent-Child Interaction Therapy (PCIT) is a behavioral family therapy approach targeting young children with emotional and behavioral problems. PCIT uses a coaching model to enable parents to teach their children skills needed to improve their social interactions.[53] PCIT was originally designed to be used with preschool-aged children to attain three primary goals: (1) increase the child's self-esteem and decrease externalizing behaviors, (2) give parents a feeling of greater self-effectiveness and competence, and (3) increase positive interaction between parents and children.[54] PCIT is currently offered in Shelby County through a clinic at the Boling Center for Developmental Disabilities and through the Exchange Club Family Center. No information is publicly available on the number of families served.

Outcomes Associated with Parent-Child Interaction Therapy

There is a vast volume of literature documenting the implementation and outcomes of PCIT. All findings discussed here are from a recent meta-analysis that attempted to synthesize program findings across parent and child outcomes from results published from 2004 to 2012.[55] Of the 11 studies included in the analysis, all used either an RCT or quasi-experimental study design. In general, PCIT appears to have an impact on reducing parental stress. Of the five studies in the meta-analysis that measured parental stress, all found positive effects of PCIT on stress reduction, though effects only reached statistical significance in two of these studies. In addition, four studies examined dysfunctional parent-child interactions; of these, two reported a significant reduction in such interactions.

The meta-analysis similarly found a positive trend for child outcomes. Results from three of four studies measuring child externalizing behavior found that PCIT had a positive effect on reducing these behavioral problems. All three of the studies used an RCT study design, although the sample sizes were relatively small. All 11 studies included in the meta-analysis showed at least a small reduction in how much of a problem the child's behavior was for the parent, but only six showed that PCIT had a significant effect on this decrease.

Parents as Teachers

Parents as Teachers is a home-visiting program serving families from pregnancy through kindergarten. The Parents as Teachers program implements the Born to Learn curriculum, the goals of which are to increase parental knowledge of child development, improve parenting practices, facilitate early detection of developmental delays or health problems, prevent child abuse and neglect, and foster school readiness.[56] The program consists of one-hour home visits that occur every two weeks or monthly, depending on family need. During the home visit, the program also offers health, vision, hearing, and developmental screenings for children, group sessions for parents to connect and interact with each other, and links to resources in the community.[57] In Shelby County, Parents as Teachers is run by Porter-Leath.[58] We did not find publicly available information on the number of children served per year.

Outcomes Associated with Parents as Teachers

The most recent RCT evaluation of Parents as Teachers that examined parent outcomes was conducted with 667 children from three geographically dispersed sites, including one on the Eastern Seaboard, one in a midsize Southern city, and one in a large western city. Outcomes were assessed at or around the child's second birthday, while participants were still receiving Parents as Teachers services. The study found no significant differences between Parents as Teachers and control parents on parenting knowledge, attitudes toward parenting, ease of

remembering details about the child's abilities, promoting language and literacy development, and home-visitor observation of language promotion or parent-child interaction.[59] No other recent experimental or quasi-experimental study has reported on parent outcomes.

The same study described above also found no differences between the overall Parents as Teachers group and the comparison group on child outcomes, including cognitive and physical development and parent report of child adaptive social behavior.[60] An RCT conducted from 1999 to 2004 with 464 families measured several childhood outcomes and found just one significant positive program impact. As compared with the control group, children from Parents as Teachers families scored higher on a scale measuring persistence of problem-solving with novel tasks at age three.[61] There were no significant differences found for cognitive development, security of attachment, adaptive behavior, language, school readiness, and social skills. Although there are few significant findings of program impact from recent rigorous studies, Parents as Teachers does meet the criteria to be listed in the HomVEE registry and in the Substance Abuse and Mental Health Services Administration National Registry of Evidence-Based Programs and Practices.[62]

Reach Out and Read

Reach Out and Read (ROR) is a clinic-based program that incorporates early literacy into pediatric health care. The goal of ROR is to encourage parents to read with their children so that children enter school with larger vocabularies and stronger language skills.[63] ROR consists of three components: providers give guidance to parents about reading aloud to their children; providers give families a free book at routine health visits between six months and six years of age; and waiting room volunteers read aloud with children, modeling effective strategies for parents.[64] In Shelby County, some pediatric clinics currently implement the program. No public information on the total number of families served is available.

Outcomes Associated with Reach Out and Read

ROR has been assessed through various studies using RCT, quasi-experimental, and pre- and post-test designs, as well as qualitative analyses. In an RCT evaluation of ROR, low-income Hispanic families were randomly assigned to the intervention.[65] Findings from the study indicate that ten months after the program, families that received the intervention reported reading more to their children and listed reading as one of their favorite activities to participate in with their children. One large, multicenter evaluation of 1,647 white, Latino, and African American families attending 19 sites across ten states found that parents exposed to ROR reported reading aloud to their children more days per week.[66] This study surveyed a sample of parents prior to implementing the ROR program (comparison group) and a separate sample of parents one year after the ROR program was established (intervention group). Intervention parents were also more likely to report book sharing (reading or talking about books) as one of their favorite things to do with their children. Most other studies examining ROR outcomes have smaller sample sizes (i.e., fewer than 200 participants).[67] In an ROR study conducted from July to August 1998 at two urban pediatric clinics, the sample consisted of 122 Latino and African American families.[68] Families at the first clinic (intervention group) had been exposed to an ROR program during the previous three years. At the second clinic (comparison group), a similar program started three months before the study. Parents in the intervention group reported reading together with their children approximately one more day per week than the comparison group.[69] Other studies with similarly small samples and nonexperimental designs have also found that exposure to ROR is associated with more time spent reading with children.[70]

With regard to child outcomes, ROR has also been associated with positive effects on children's language skills.[71] Studies that have measured receptive language and receptive vocabulary in children ranging from two to six years old have found that children exposed to ROR performed better on these specific skills.[72]

Summary

The seven programs included in this section highlight the previously evaluated parenting programs, including parent education and parent training programs, currently operating in Shelby County. Programs included in this review offer multiple service-delivery options (e.g., center-based, home-based, mixed approach). Additionally, all programs affect one or more domains of parenting practices or child outcomes. However, not all programs affect every domain, and some appear to be more effective than others at improving parenting or child outcomes. For example, several home-visiting programs are currently operating in Shelby County, yet not all are producing the same outcomes (e.g., Parents as Teachers compared with

Although evidence exists that supports the effectiveness of parenting programs, not all programs produce the same levels of evidence of effectiveness, and notable gaps in the research remain.

Nurse-Family Partnership), which might be a result of program goals or focus, among other reasons. In the conclusion section, we focus on how organizations in Shelby County can use this information to support evidence-based programs similar to some of the ones described here or promote rigorous evaluations of parenting programs in the county.

CONCLUSION

The goal of this report was to answer the research question of **what outcomes are associated with previously evaluated parenting programs currently operating in Shelby County, Tennessee.** We described seven rigorously evaluated programs currently operating in Shelby County. Each of the programs included in this report is associated with improvements in at least some parenting or child outcomes. We find that some parenting programs included in this report are more intensive in service delivery than others (e.g., Nurse-Family Partnership compared with ROR), and some programs have produced more-robust results than others (e.g., Early Head Start compared with Parents as Teachers). Additionally, some of the parenting programs in the report are able to demonstrate long-term effects, such as Head Start and Nurse-Family Partnership. We described the seven programs individually and the outcomes associated with each as a way for UCI and organizations to understand the evidence supporting these programs. Next, we discuss some key gaps in the knowledge base of parenting programs and conclude with recommendations for organizations in Shelby County wishing to support and promote such programs.

Gaps in the Knowledge Base of Parenting Programs

Although evidence exists that supports the effectiveness of parenting programs, not all programs produce the same levels of evidence of effectiveness, and notable gaps in the research remain. First, **programs have varying levels of intensity**. For example, Nurse-Family Partnership and Early Head Start are fairly intensive programs compared with ROR; however, the cost for the latter is significantly less. Given this, a next research step could be cost-benefit analyses of programs, particularly those that have not previously undergone similar analyses, to determine how the costs and benefits of programs with varying intensities differ. Second, **programs target different audiences**. The majority of research on program effectiveness comes from disadvantaged or at-risk populations; less is known about the effectiveness of programs on a universal scale. Providing all parents access to programming may be beneficial but with limited funding may not be realistic. Because of this, understanding more about what works for which parents or children is an important next step for program evaluations and for future program implementation.[73]

Finally, many parenting programs currently operating in Shelby County have not undergone rigorous evaluations on a large scale. For those that have, even fewer have conducted long-term follow-ups. Understanding whether programs, particularly those that are rolled out on a more local level, lead to improved parenting practices and child outcomes is essential for program funding and longevity. Conducting rigorous evaluations can help practitioners articulate the value added from their programs and help funders determine which programs to continue or begin supporting.

Recommendations for UCI and Organizations in Shelby County

Based on the overviews of rigorously evaluated parenting programs in Shelby County, as well as the above discussion of gaps in the knowledge base, we provide two overarching recommendations for such organizations as UCI in Shelby County that

Organizations can use the information in this report to begin identifying other programs in the county that may be similar in scope and delivery and that should be evaluated using rigorous methods.

seek to either support or promote programs that serve parents of young children.

Recommendation: Continue to support existing programs with a strong evidence base and demonstrated outcomes that are currently operating in the county by promoting them to parents in need and advocating for additional resources and program capacity to meet increased demand. One way to do this is to provide a list of evaluated programs that produced significant positive outcomes to pediatrician offices and other places frequently visited by expecting mothers or families with young children. However, before such a list is distributed, it may first be necessary to determine whether programs included are being implemented with fidelity, such that similar results to published evaluation reports can be expected. The program list could be maintained by a central organization in the community, such as UCI, and could be updated as more programs undergo evaluations. Additionally, the list of programs and links to more information on each program could be included in multiple organizations' websites or published in other organizational materials, where families and staff working with families can easily access it. Community organizations can also support existing evaluated programs by sharing parent and child outcomes associated with programs and highlighting the importance of programs for endorsing positive parenting practices. For instance, organizations can work together with programs to provide grant-writing assistance or partnership for additional funding to expand services. Also, a partnership between a parenting program and an organization such as UCI can link programs to a wider network so that information can be easily shared and programs can refer parents to other services if needed.

Recommendation: Financially support and advocate for evaluating existing parenting programs that have not previously been evaluated with rigorous designs. One way to decide which evaluations to support is by gathering information on programs, such as the number and characteristics of families they serve, program elements and components, and previous history of evaluation. By understanding these programmatic characteristics, organizations such as UCI can compare them with effective program components and elements to determine which ones are most likely to produce positive outcomes. This is especially important when limited funds are available for evaluation and program implementation.

UCI and other community organizations can then work with parenting programs that wish to undergo evaluations by discussing the importance of selecting a qualified, independent evaluator and conducting rigorous evaluations that meet the highest standards in the research field. One way to support programs through this process is to facilitate communication among a cohort of multiple programs being evaluated. Within this cohort, program directors and staff can meet to discuss evaluation successes and challenges. UCI and other Shelby County organizations can help facilitate these conversations by bringing in program and evaluation experts to answer questions and provide research-based guidance. Additionally, community organizations can help disseminate the results at public events and through online and in-person communication with community members and potential funders or supporters. Organizations can use the information in this report to begin identifying other programs in the county that may be similar in scope and delivery and that should be evaluated using rigorous methods. Through implementing some of these strategies, organizations such as UCI can support local programs that wish to undergo evaluations, improve services, and help connect families to effective programs that are most likely to produce desired results.

Notes

[1] See, for example, Yvonne Anders, Hans-Günther Rossbach, Sabine Weinert, Susanne Ebert, Susanne Kuger, Simone Lehrl, and Jutta von Maurice, "Home and Preschool Learning Environments and Their Relations to the Development of Early Numeracy Skills," *Early Childhood Research Quarterly*, Vol. 27, No. 2, 2012; Robert H. Bradley, Bettye M. Caldwell, and Stephen L. Rock, "Home Environment and School Performance: A Ten-Year Follow-up and Examination of Three Models of Environmental Action," *Child Development*, Vol. 59, No. 4, 1988; Robert H. Bradley, Bettye M. Caldwell, Stephen L. Rock, Craig T. Ramey, Kathryn E. Barnard, Carol Gray, Mary A. Hammond, Sandra Mitchell, Allen W. Gottfried, and Linda Siegel, "Home Environment and Cognitive Development in the First 3 Years of Life: A Collaborative Study Involving Six Sites and Three Ethnic Groups in North America," *Developmental Psychology*, Vol. 25, No. 2, 1989, p. 217; Rachel Chazan-Cohen, Helen Raikes, Jeanne Brooks-Gunn, Catherine Ayoub, Barbara Alexander Pan, Ellen E. Kisker, Lori Roggman, and Allison Sidle Fuligni, "Low-Income Children's School Readiness: Parent Contributions over the First Five Years," *Early Education and Development*, Vol. 20, No. 6, 2009; Jason T. Downer and Robert C. Pianta, "Academic and Cognitive Functioning in First Grade: Associations with Earlier Home and Child Care Predictors and with Concurrent Home and Classroom Experiences," *School Psychology Review*, Vol. 35, No. 1, 2006, p. 11.

[2] For more information on UCI, see Laurie T. Martin, Lisa Sontag-Padilla, Jill S. Cannon, Anamarie Auger, Rebecca Diamond, Catherine Joyce, Katherine L. Spurlock, and Anita Chandra, *Off to a Good Start: Social and Emotional Development of Memphis' Children*, Santa Monica, Calif.: RAND Corporation, TL-161-TUCI, 2015, as well as UCI's website: www.urbanchildinstitute.org.

[3] In this report, we refer to programs operating in Shelby County and Memphis, Tennessee. For consistency and simplicity, throughout the remainder of the report we use Shelby County to refer to this geographic location.

[4] In this report, birth to age five means until the child's fifth birthday.

[5] Nermeen E. El Nokali, Heather J. Bachman, and Elizabeth Votruba-Drzal, "Parent Involvement and Children's Academic and Social Development in Elementary School," *Child Development*, Vol. 81, No. 3, 2010, "Parent Involvement and Children's Academic and Social Development in Elementary School," *Child Development*, Vol. 81, No. 3, 2010; Christine McWayne, John Fantuzzo, Heather L. Cohen, and Yumiko Sekino, "A Multivariate Examination of Parent Involvement and the Social and Academic Competencies of Urban Kindergarten Children," *Psychology in the Schools*, Vol. 41, No. 3, 2004; Wendy T. Miedel and Arthur J. Reynolds, "Parent Involvement in Early Intervention for Disadvantaged Children: Does It Matter?" *Journal of School Psychology*, Vol. 37, No. 4, 2000.

[6] See, for example, Brad Lundahl, Heather J. Risser, and M. Christine Lovejoy, "A Meta-Analysis of Parent Training: Moderators and Follow-up Effects," *Clinical Psychology Review*, Vol. 26, No. 1, 2006; Gerald Mahoney, Ann Kaiser, Luigi Girolametto, James MacDonald, Cordelia Robinson, Philip Safford, and Donna Spiker, "Parent Education in Early Intervention: A Call for a Renewed Focus," *Topics in Early Childhood Special Education*, Vol. 19, No. 3, 1999; Virginia Statewide Parent Education Coalition, *VSPEC Parent Education Referral Toolkit*, Richmond, Va., 2013; California Evidence-Based Clearinghouse, "Parent Training Programs," undated; Sharon E. Hirschy, "What Is Parent Education?" University of North Texas Center for Parent Education, 2001.

[7] Linda C. Halgunseth, Amy Peterson, Deborah R. Starl, and Shannon Moodie, *Family Engagement, Diverse Families, and Early Childhood Education Programs: An Integrated Review of the Literature*, Washington, D.C.: National Association for the Education of Young Children, 2009.

[8] See, for example, "The Incredible Years Series®: A Developmental Approach," in Mark J. Van Ryzin, Karol L. Kumpfer, Gregory M. Fosco, and Mark T. Greenberg, eds., *Family-Based Prevention Programs for Children and Adolescents: Theory, Research, and Large-Scale Dissemination*, New York: Psychology Press, 2015, p. 42.

[9] Examples of programs include Nurse-Family Partnership and Healthy Families. See David L. Olds, "The Nurse–Family Partnership: An Evidence-Based Preventive Intervention," *Infant Mental Health Journal*, Vol. 27, No. 1, 2006; Anne Duggan, Debra Caldera, Kira Rodriguez, Lori Burrell, Charles Rohde, and Sarah Shea Crowne, "Impact of a Statewide Home Visiting Program to Prevent Child Abuse," *Child Abuse and Neglect*, Vol. 31, 2007.

[10] See, for example, Jeanne Brooks-Gunn, Lisa J. Berlin, and Allison Sidle Fuligni, "Early Childhood Intervention Programs: What About the Family?" in Jack P. Shonkoff and Samuel J. Meisels, eds., *Handbook of Early Childhood Intervention*, 2nd ed., New York: Cambridge University Press, 2000; Nicole Forry, Juliet Bromer, Alison Chrisler, Laura Rothenberg, Shana Simkin, and Paula Daneri, *Family-Provider Relationship Quality: Review of Conceptual and Empirical Literature of Family-Provider Relationships*, Washington, D.C.: Administration for Children and Families, Office of Planning, Research and Evaluation, 2012.

[11] See, for example, Kenneth A. Dodge, W. Benjamin Goodman, Robert A. Murphy, Karen O'Donnell, Jeannine Sato, and Susan Guptill, "Implementation and Randomized Controlled Trial Evaluation of Universal Postnatal Nurse Home Visiting," *American Journal of Public Health*, Vol. 104, No. S1, 2014; John M. Love, Ellen Eliason Kisker, Christine Ross, Helen Raikes, Jill Constantine, Kimberly Boller, Jeanne Brooks-Gunn, Rachel Chazan-Cohen, Louisa Banks Tarullo, and Christy Brady-Smith, "The Effectiveness of Early Head Start for 3-Year-Old Children and Their Parents: Lessons for Policy and Programs," *Developmental Psychology*, Vol. 41, No. 6, 2005; Michael Puma, Stephen Bell, Ronna Cook, Camilla Heid, Gary Shapiro, Pam Broene, Frank Jenkins, Philip Fletcher, Liz Quinn, and Janet Friedman, *Head Start Impact Study: Final Report*, Washington, D.C.: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2010.

[12] Sarah Avellar, Diane Paulsell, Emily Sama-Miller, Patricia Del Grosso, Lauren Akers, and Rebecca Kleinman, *Home Visiting Evidence of Effectiveness Review: Executive Summary*, Washington, D.C.: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2016; Monica A. Sweet and Mark I. Appelbaum, "Is Home Visiting an Effective Strategy? A Meta-Analytic Review of Home Visiting Programs for Families with Young Children," *Child Development*, Vol. 75, No. 5, 2004.

[13] Arthur J. Reynolds, *Success in Early Intervention: The Chicago Child Parent Centers*, Lincoln: University of Nebraska Press, 2000; Office of Head Start, 45 Code of Federal Regulations, Chapter XIII, *Head Start Program Performance Standards*, Section 1304.40, Family Partnerships, Washington, D.C.: Administration for Children and Families, U.S. Department of Health and Human Services, 2015; Edward Zigler and Sally J. Styfco, *Head Start and Beyond: A National Plan for Extended Childhood Intervention*, New Haven, Conn.: Yale University Press, 1995.

[14] William R. Shadish, Thomas D. Cook, and Donald T. Campbell, *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*, Belmont, Calif.: Wadsworth Cengage Learning, 2002.

[15] In some cases, denying a child a particular intervention might be considered unethical if the belief is that the intervention would provide significant benefits to the child. In other cases, it might not be feasible to randomly assign children or parents within the context of the program.

[16] Office of Head Start, 2015.

[17] For more information, see Porter-Leath, "Early Head Start," undated-a.

[18] Office of Head Start, *Office of Head Start—Head Start Services Snapshot: Children's Bureau Inc. dba Porter-Leath (2014–2015)*, Washington, D.C.: Administration for Children and Families, U.S. Department of Health and Human Services, undated-a.

[19] John M. Love, Ellen Eliason Kisker, Christine Ross, Peter Z. Schochet, Jeanne Brooks-Gunn, Diane Paulsell, Kimberly Boller, Jill Constantine, Cheri Vogel, and Alison Sidle Fuligni, *Making a Difference in the Lives of Infants and Toddlers and Their Families: The Impacts of Early Head Start*, Vols. I–III, Washington, D.C.: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2002.

[20] Love et al., 2002; Love et al., 2005.

[21] Cheri Vogel, Jeanne Brooks-Gunn, Anne Martin, and Mary M. Klute, "III. Impacts of Early Head Start Participation on Child and Parent Outcomes at Ages 2, 3, and 5," *Monographs of the Society for Research in Child Development*, Vol. 78, No. 1, 2013.

[22] Vogel et al., 2013.

[23] Vogel et al., 2013.

[24] Vogel et al., 2013.

[25] Office of Head Start, 2015.

[26] Head Start grantees manage the funds from the federal government but do not necessarily deliver all programming. For example, Head Start programs can be operated through the school district or through other programs not affiliated with the school district in the county. For more information on Shelby County Head Start services for 2014–2015, see Office of Head Start, *Office of Head Start—Head Start Services Snapshot: Shelby County Board of Education (2014–2015)*, Washington, D.C.: Administration for Children and Families, U.S. Department of Health and Human Services, undated-b.

[27] Puma et al., 2010.

[28] Alexander Gelber and Adam Isen, "Children's Schooling and Parents' Behavior: Evidence from the Head Start Impact Study," *Journal of Public Economics*, Vol. 101, 2013.

[29] Michael Puma, Stephen Bell, Ronna Cook, Camilla Heid, Pam Broene, Frank Jenkins, Andrew Mashburn, and Jason Downer, *Third Grade Follow-up to the Head Start Impact Study Final Report*, Washington, D.C.: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2012.

[30] Puma et al., 2012.

[31] Jens Ludwig and Douglas L. Miller, "Does Head Start Improve Children's Life Chances? Evidence from a Regression Discontinuity Design," *The Quarterly Journal of Economics*, Vol. 122, No. 1, 2007.

[32] David Deming, "Early Childhood Intervention and Life-Cycle Skill Development: Evidence from Head Start," *American Economic Journal: Applied Economics*, Vol. 1, No. 3, July 2009.

[33] For more information, see Healthy Families America, "The Healthy Families America Strategy," undated.

[34] Debra Caldera, Lori Burrell, Kira Rodriguez, Sarah Shea Crowne, Charles Rohde, and Anne Duggan, "Impact of a Statewide Home Visiting Program on Parenting and on Child Health and Development," *Child Abuse and Neglect*, Vol. 31, 2007.

[35] Kathryn Harding, Joseph Galano, Joanne Martin, Lee Huntington, and Cynthia J. Schellenbach, "Healthy Families America® Effectiveness: A Comprehensive Review of Outcomes," *Journal of Prevention and Intervention in the Community*, Vol. 34, Nos. 1–2, 2007.

[36] Home Visiting Evidence of Effectiveness, "Healthy Families America (HFA): In Brief; Evidence of Program Model Effectiveness," July 2013.

[37] Caldera et al., 2007.

[38] Caldera et al., 2007.

[39] Craig Winston LeCroy and Judy Krysik, "A Randomized Trial of the Healthy Families Arizona Home Visiting Program," *Children and Youth Services Review*, Vol. 33, No. 10, 2011.

[40] LeCroy and Krysik, 2011.

[41] Anne Duggan, Elizabeth McFarlane, Loretta Fuddy, Lori Burrell, Susan M. Higman, Amy Windham, and Calvin Sia, "Randomized Trial of a Statewide Home Visiting Program: Impact in Preventing Child Abuse and Neglect," *Child Abuse and Neglect*, Vol. 28, No. 6, 2004.

[42] Kimberly DuMont, Susan Mitchell-Herzfeld, Rose Greene, Eunju Lee, Ann Lowenfels, Monica Rodriguez, and Vajeera Dorabawila, "Healthy Families New York (HFNY) Randomized Trial: Effects on Early Child Abuse and Neglect," *Child Abuse and Neglect*, Vol. 32, No. 3, 2008.

[43] Caldera et al., 2007.

[44] Harding et al., 2007.

[45] For more information, see Le Bonheur Children's Hospital, "Nurse-Family Partnership," undated.

[46] Harriet Kitzman, David L. Olds, Charles R. Henderson, Carole Hanks, Robert Cole, Robert Tatelbaum, Kenneth M. McConnochie, Kimberly Sidora, Dennis W. Luckey, David Shaver, Kay Engelhardt, David James, and Kathryn Barnard, "Effect of Prenatal and Infancy Home Visitation by Nurses on Pregnancy Outcomes, Childhood Injuries, and Repeated Childbearing: A Randomized Controlled Trial," *JAMA*, Vol. 278, No. 8, 1997.

[47] Kitzman et al., 1997.

[48] David L. Olds, Harriet Kitzman, Robert Cole, JoAnn Robinson, Kimberly Sidora, Dennis W. Luckey, Charles R. Henderson, Carole Hanks, Jessica Bondy, and John Holmberg, "Effects of Nurse Home Visiting on Maternal Life-Course and Child Development: Age-Six Follow-up of a Randomized Trial," *Pediatrics*, Vol. 114, 2004.

[49] David L. Olds, Harriet Kitzman, Robert Cole, Carole Hanks, Kimberly J. Arcoleo, Elizabeth A. Anson, Dennis Luckey, Michael D. Knudtson, Charles R. Henderson Jr., Jessica Bondy, and Amanda J. Stevenson, "Enduring Effects of Prenatal and Infancy Home Visiting by Nurses on Maternal Life Course and Government Spending: Follow-up of a Randomized Trial Among Children at Age 12 Years," *Archives of Pediatrics and Adolescent Medicine*, Vol. 164, No. 5, May 2010.

[50] Kitzman et al., 1997.

[51] Olds et al., 2004.

[52] Olds et al., 2010.

[53] For more information, see PCIT International, "What Is PCIT?" undated.

[54] Morgan E. Cooley, Amanda Veldorale-Griffin, Raymond E. Petren, and Ann K. Mullis, "Parent–Child Interaction Therapy: A Meta-Analysis of Child Behavior Outcomes and Parent Stress," *Journal of Family Social Work*, Vol. 17, No. 3, 2014.

[55] Cooley et al., 2014.

[56] For more information, see the website of Parents as Teachers: www.parentsasteachers.org.

[57] Parents as Teachers, "Core Competencies Fact Sheet," 2012.

[58] Porter-Leath, "Partners," undated-b.

[59] Mary Wagner, Donna Spiker, F. Hernandez, J. Song, and S. Gerlach-Downie, *Multisite Parents as Teachers Evaluation: Experiences and Outcomes for Children and Families*, Menlo Park, Calif.: SRI International, 2001, p. 26.

[60] Wagner et al., 2001.

[61] Dennis Drotar, J. Robinson, L. Jeavons, and H. Lester Kirchner, "A Randomized, Controlled Evaluation of Early Intervention: The Born to Learn Curriculum," *Child Care Health Development*, Vol. 35, No. 5, 2009.

[62] For more information, see Parents as Teachers, undated; Substance Abuse and Mental Health Services Administration, *Parents as Teachers*, National Registry of Evidence-Based Programs and Practices, Washington, D.C.: U.S. Department of Health and Human Services, undated.

[63] For more information, see Reach Out and Read, "About Reach Out and Read," undated.

[64] Robert Needlman, Karen H. Toker, Benard P. Dreyer, Perri Klass, and Alan L. Mendelsohn, "Effectiveness of a Primary Care Intervention to Support Reading Aloud: A Multicenter Evaluation," *Ambulatory Pediatrics*, Vol. 5, No. 4, 2005.

[65] Natalia Golova, Anthony J. Alario, Patrick M. Vivier, Margarita Rodriguez, and Pamela C. High, "Literacy Promotion for Hispanic Families in a Primary Care Setting: A Randomized, Controlled Trial," *Pediatrics*, Vol. 103, No. 5, 1999.

[66] Needlman et al., 2005.

[67] See, for example, Pamela C. High, Linda LaGasse, Samuel Becker, Ingrid Ahlgren, and Adrian Gardner, "Literacy Promotion in Primary Care Pediatrics: Can We Make a Difference?" *Pediatrics*, Vol. 105, No. 4, 2000; Leora N. Mogilner, Benard P. Dreyer, Joel A. Forman, Stacey C. Weinstein, Monica Broderick, Karyn J. Cheng, Tamara Magloire, Taska Moore, and Camille Napier, "The Impact of a Clinic-Based Literacy Intervention on Language Development in Inner-City Preschool Children," *Pediatrics*, Vol. 107, No. 1, 2001; Michael Silverstein, Leslie Iverson, and Paula Lozano, "An English-Language Clinic-Based Literacy Program Is Effective for a Multi-Lingual Population," *Pediatrics*, Vol. 109, No. 5, 2002.

[68] Alan L. Mendelsohn, Leora N. Mogilner, Benard P. Dreyer, Joel A. Forman, Stacey C. Weinstein, Monica Broderick, Karyn J. Cheng, Tamara Magloire, Taska Moore, and Camille Napier, "The Impact of a Clinic-Based Literacy Intervention on Language Development in Inner-City Preschool Children," *Pediatrics*, Vol. 107, No. 1, 2001.

[69] Mendelsohn et al., 2001.

[70] High et al., 2000; Silverstein, Iverson, and Lozano, 2002.

[71] Mendelsohn et al., 2001.

[72] Mendelsohn et al., 2001; Iman Sharif, Sarah Rieber, and Philip O. Ozuah, "Exposure to Reach Out and Read and Vocabulary Outcomes in Inner City Preschoolers," *Journal of the National Medical Association*, Vol. 94, No. 3, 2002.

[73] Evaluations of Head Start and Early Head Start do examine subgroup effects. See, for example, Helen H. Raikes, Cheri Vogel, and John M. Love, "IV. Family Subgroups and Impacts at Ages 2, 3, and 5: Variability by Race/Ethnicity and Demographic Risk," *Monographs of the Society for Research in Child Development*, Vol. 78, No. 1, 2013; Puma et al., 2010.

References

Anders, Yvonne, Hans-Günther Rossbach, Sabine Weinert, Susanne Ebert, Susanne Kuger, Simone Lehrl, and Jutta von Maurice, "Home and Preschool Learning Environments and Their Relations to the Development of Early Numeracy Skills," *Early Childhood Research Quarterly*, Vol. 27, No. 2, 2012, pp. 231–244.

Avellar, Sarah, Diane Paulsell, Emily Sama-Miller, Patricia Del Grosso, Lauren Akers, and Rebecca Kleinman, *Home Visiting Evidence of Effectiveness Review: Executive Summary*, Washington, D.C.: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2016.

Bradley, Robert H., Bettye M. Caldwell, and Stephen L. Rock, "Home Environment and School Performance: A Ten-Year Follow-up and Examination of Three Models of Environmental Action," *Child Development*, Vol. 59, No. 4, 1988, pp. 852–867.

Bradley, Robert H., Bettye M. Caldwell, Stephen L. Rock, Craig T. Ramey, Kathryn E. Barnard, Carol Gray, Mary A. Hammond, Sandra Mitchell, Allen W. Gottfried, and Linda Siegel, "Home Environment and Cognitive Development in the First 3 Years of Life: A Collaborative Study Involving Six Sites and Three Ethnic Groups in North America," *Developmental Psychology*, Vol. 25, No. 2, 1989, pp. 217–235.

Brooks-Gunn, Jeanne, Lisa J. Berlin, and Allison Sidle Fuligni, "Early Childhood Intervention Programs: What About the Family?" in Jack P. Shonkoff and Samuel J. Meisels, eds., *Handbook of Early Childhood Intervention*, 2nd ed., New York: Cambridge University Press, 2000, pp. 549–588.

Caldera, Debra, Lori Burrell, Kira Rodriguez, Sarah Shea Crowne, Charles Rohde, and Anne Duggan, "Impact of a Statewide Home Visiting Program on Parenting and on Child Health and Development," *Child Abuse and Neglect*, Vol. 31, 2007, pp. 829–852.

California Evidence-Based Clearinghouse, "Parent Training Programs," undated. As of April 20, 2016: http://www.cebc4cw.org/topic/parent-training/

Chazan-Cohen, Rachel, Helen Raikes, Jeanne Brooks-Gunn, Catherine Ayoub, Barbara Alexander Pan, Ellen E. Kisker, Lori Roggman, and Allison Sidle Fuligni, "Low-Income Children's School Readiness: Parent Contributions over the First Five Years," *Early Education and Development*, Vol. 20, No. 6, 2009, pp. 958–977.

Cooley, Morgan E., Amanda Veldorale-Griffin, Raymond E. Petren, and Ann K. Mullis, "Parent–Child Interaction Therapy: A Meta-Analysis of Child Behavior Outcomes and Parent Stress," *Journal of Family Social Work*, Vol. 17, No. 3, 2014, pp. 191–208.

Deming, David, "Early Childhood Intervention and Life-Cycle Skill Development: Evidence from Head Start," *American Economic Journal: Applied Economics*, Vol. 1, No. 3, July 2009, pp. 111–134.

Dodge, Kenneth A., W. Benjamin Goodman, Robert A. Murphy, Karen O'Donnell, Jeannine Sato, and Susan Guptill, "Implementation and Randomized Controlled Trial Evaluation of Universal Postnatal Nurse Home Visiting," *American Journal of Public Health*, Vol. 104, No. S1, 2014, pp. S136–S143.

Downer, Jason T., and Robert C. Pianta, "Academic and Cognitive Functioning in First Grade: Associations with Earlier Home and Child Care Predictors and with Concurrent Home and Classroom Experiences," *School Psychology Review*, Vol. 35, No. 1, 2006, pp. 11–30.

Drotar, Dennis, J. Robinson, L. Jeavons, and H. Lester Kirchner, "A Randomized, Controlled Evaluation of Early Intervention: The Born to Learn Curriculum," *Child Care Health Development*, Vol. 35, No. 5, 2009, pp. 643–649.

Duggan, Anne, Debra Caldera, Kira Rodriguez, Lori Burrell, Charles Rohde, and Sarah Shea Crowne, "Impact of a Statewide Home Visiting Program to Prevent Child Abuse," *Child Abuse and Neglect*, Vol. 31, 2007, pp. 801–827.

Duggan, Anne, Elizabeth McFarlane, Loretta Fuddy, Lori Burrell, Susan M. Higman, Amy Windham, and Calvin Sia, "Randomized Trial of a Statewide Home Visiting Program: Impact in Preventing Child Abuse and Neglect," *Child Abuse and Neglect*, Vol. 28, No. 6, 2004, pp. 597–622.

DuMont, Kimberly, Susan Mitchell-Herzfeld, Rose Greene, Eunju Lee, Ann Lowenfels, Monica Rodriguez, and Vajeera Dorabawila, "Healthy Families New York (HFNY) Randomized Trial: Effects on Early Child Abuse and Neglect," *Child Abuse and Neglect*, Vol. 32, No. 3, 2008, pp. 295–315.

El Nokali, Nermeen E., Heather J. Bachman, and Elizabeth Votruba-Drzal, "Parent Involvement and Children's Academic and Social Development in Elementary School," *Child Development*, Vol. 81, No. 3, 2010, pp. 988–1005.

Forry, Nicole, Juliet Bromer, Alison Chrisler, Laura Rothenberg, Shana Simkin, and Paula Daneri, *Family-Provider Relationship Quality: Review of Conceptual and Empirical Literature of Family-Provider Relationships*, Washington, D.C.: Administration for Children and Families, Office of Planning, Research and Evaluation, 2012.

Gelber, Alexander, and Adam Isen, "Children's Schooling and Parents' Behavior: Evidence from the Head Start Impact Study," *Journal of Public Economics*, Vol. 101, 2013, pp. 25–38.

Golova, Natalia, Anthony J. Alario, Patrick M. Vivier, Margarita Rodriguez, and Pamela C. High, "Literacy Promotion for Hispanic Families in a Primary Care Setting: A Randomized, Controlled Trial," *Pediatrics*, Vol. 103, No. 5, 1999, pp. 993–997.

Halgunseth, Linda C., Amy Peterson, Deborah R. Starl, and Shannon Moodie, *Family Engagement, Diverse Families, and Early Childhood Education Programs: An Integrated Review of the Literature*, Washington, D.C.: National Association for the Education of Young Children, 2009.

Harding, Kathryn, Joseph Galano, Joanne Martin, Lee Huntington, and Cynthia J. Schellenbach, "Healthy Families America® Effectiveness: A Comprehensive Review of Outcomes," *Journal of Prevention and Intervention in the Community*, Vol. 34, Nos. 1–2, 2007, pp. 149–179.

Healthy Families America, "The Healthy Families America Strategy," undated. As of April 20, 2016: http://www.healthyfamiliesamerica.org/the-hfa-strategy-1/

High, Pamela C., Linda LaGasse, Samuel Becker, Ingrid Ahlgren, and Adrian Gardner, "Literacy Promotion in Primary Care Pediatrics: Can We Make a Difference?" *Pediatrics*, Vol. 105, No. 4, 2000, pp. 927–934.

Hirschy, Sharon E., "What Is Parent Education?" University of North Texas Center for Parent Education, 2001. As of April 20, 2016: https://parenteducation.unt.edu/resources/publication-university-north-texas-center-parent-education-partnership-texas-council-fam-2

Home Visiting Evidence of Effectiveness, "Healthy Families America (HFA): In Brief; Evidence of Program Model Effectiveness," July 2013. As of April 20, 2016: http://homvee.acf.hhs.gov/Model/1/Healthy-Families-America--HFA--sup---sup-/10/1

Kitzman, Harriet, David L. Olds, Charles R. Henderson, Carole Hanks, Robert Cole, Robert Tatelbaum, Kenneth M. McConnochie, Kimberly Sidora, Dennis W. Luckey, David Shaver, Kay Engelhardt, David James, and Kathryn Barnard, "Effect of Prenatal and Infancy Home Visitation by Nurses on Pregnancy Outcomes, Childhood Injuries, and Repeated Childbearing: A Randomized Controlled Trial," *JAMA*, Vol. 278, No. 8, 1997, pp. 644–652.

Le Bonheur Children's Hospital, "Nurse-Family Partnership," undated. As of April 20, 2016: http://www.lebonheur.org/kids-health-wellness/le-bonheur-in-the-community/nurse-family-partnership/index.dot

LeCroy, Craig Winston, and Judy Krysik, "A Randomized Trial of the Healthy Families Arizona Home Visiting Program," *Children and Youth Services Review*, Vol. 33, No. 10, 2011, pp. 1761–1766.

Love, John M., Ellen Eliason Kisker, Christine Ross, Helen Raikes, Jill Constantine, Kimberly Boller, Jeanne Brooks-Gunn, Rachel Chazan-Cohen, Louisa Banks Tarullo, and Christy Brady-Smith, "The Effectiveness of Early Head Start for 3-Year-Old Children and Their Parents: Lessons for Policy and Programs," *Developmental Psychology*, Vol. 41, No. 6, 2005, pp. 885–901.

Love, John M., Ellen Eliason Kisker, Christine Ross, Peter Z. Schochet, Jeanne Brooks-Gunn, Diane Paulsell, Kimberly Boller, Jill Constantine, Cheri Vogel, and Alison Sidle Fuligni, *Making a Difference in the Lives of Infants and Toddlers and Their Families: The Impacts of Early Head Start*, Vols. I–III, Washington, D.C.: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2002.

Ludwig, Jens, and Douglas L. Miller, "Does Head Start Improve Children's Life Chances? Evidence from a Regression Discontinuity Design," *The Quarterly Journal of Economics*, Vol. 122, No. 1, 2007, pp. 159–208.

Lundahl, Brad, Heather J. Risser, and M. Christine Lovejoy, "A Meta-Analysis of Parent Training: Moderators and Follow-up Effects," *Clinical Psychology Review*, Vol. 26, No. 1, 2006, pp. 86–104.

Mahoney, Gerald, Ann Kaiser, Luigi Girolametto, James MacDonald, Cordelia Robinson, Philip Safford, and Donna Spiker, "Parent Education in Early Intervention: A Call for a Renewed Focus," *Topics in Early Childhood Special Education*, Vol. 19, No. 3, 1999, pp. 131–140.

Martin, Laurie T., Lisa Sontag-Padilla, Jill S. Cannon, Anamarie Auger, Rebecca Diamond, Catherine Joyce, Katherine L. Spurlock, and Anita Chandra, *Off to a Good Start: Social and Emotional Development of Memphis' Children*, Santa Monica, Calif.: RAND Corporation, TL-161-TUCI, 2015. As of April 20, 2016: http://www.rand.org/pubs/tools/TL161.html

McWayne, Christine, John Fantuzzo, Heather L. Cohen, and Yumiko Sekino, "A Multivariate Examination of Parent Involvement and the Social and Academic Competencies of Urban Kindergarten Children," *Psychology in the Schools*, Vol. 41, No. 3, 2004, pp. 363–377.

Mendelsohn, Alan L., Leora N. Mogilner, Benard P. Dreyer, Joel A. Forman, Stacey C. Weinstein, Monica Broderick, Karyn J. Cheng, Tamara Magloire, Taska Moore, and Camille Napier, "The Impact of a Clinic-Based Literacy Intervention on Language Development in Inner-City Preschool Children," *Pediatrics*, Vol. 107, No. 1, 2001, pp. 130–134.

Miedel, Wendy T., and Arthur J. Reynolds, "Parent Involvement in Early Intervention for Disadvantaged Children: Does It Matter?" *Journal of School Psychology*, Vol. 37, No. 4, 2000, pp. 379–402.

Needlman, Robert, Karen H. Toker, Benard P. Dreyer, Perri Klass, and Alan L. Mendelsohn, "Effectiveness of a Primary Care Intervention to Support Reading Aloud: A Multicenter Evaluation," *Ambulatory Pediatrics*, Vol. 5, No. 4, 2005, pp. 209–215.

Office of Head Start, *Office of Head Start—Head Start Services Snapshot: Children's Bureau Inc. dba Porter-Leath (2014–2015)*, Washington, D.C.: Administration for Children and Families, U.S. Department of Health and Human Services, undated-a. As of April 20, 2016: http://eclkc.ohs.acf.hhs.gov/hslc/data/psr/results?findType=programdetails&grantee_id=&grantee_search_type=&grantId=04CH4730&delegate_no=200&findGrantName=&findGrantState=TN&findGrantType=&findSearchType=&findGrantNumber

———, *Office of Head Start—Head Start Services Snapshot: Shelby County Board of Education (2014–2015)*, Washington, D.C.: Administration for Children and Families, U.S. Department of Health and Human Services, undated-b. As of April 20, 2016: http://eclkc.ohs.acf.hhs.gov/hslc/data/psr/results?findType=programdetails&grantee_id=&grantee_search_type=&grantId=04CH4727&delegate_no=000&findGrantName=&findGrantState=TN&findGrantType=&findSearchType=&findGrantNumber

———, 45 Code of Federal Regulations, Chapter XIII, *Head Start Program Performance Standards*, Section 1304.40, Family Partnerships, Washington, D.C.: Administration for Children and Families, U.S. Department of Health and Human Services, 2015. As of February 2, 2016: http://eclkc.ohs.acf.hhs.gov/hslc/standards/hspps/1304/1304.40%20Family%20partnerships..htm

Olds, David L., "The Nurse–Family Partnership: An Evidence-Based Preventive Intervention," *Infant Mental Health Journal*, Vol. 27, No. 1, 2006, pp. 5–25.

Olds, David L., Harriet Kitzman, Robert Cole, Carole Hanks, Kimberly J. Arcoleo, Elizabeth A. Anson, Dennis Luckey, Michael D. Knudtson, Charles R. Henderson Jr., Jessica Bondy, and Amanda J. Stevenson, "Enduring Effects of Prenatal and Infancy Home Visiting by Nurses on Maternal Life Course and Government Spending: Follow-up of a Randomized Trial Among Children at Age 12 Years," *Archives of Pediatrics and Adolescent Medicine*, Vol. 164, No. 5, May 2010, pp. 419–424.

Olds, David L., Harriet Kitzman, Robert Cole, JoAnn Robinson, Kimberly Sidora, Dennis W. Luckey, Charles R. Henderson, Carole Hanks, Jessica Bondy, and John Holmberg, "Effects of Nurse Home Visiting on Maternal Life-Course and Child Development: Age-Six Follow-up of a Randomized Trial," *Pediatrics*, Vol. 114, 2004, pp. 1550–1559.

Parents as Teachers, "Core Competencies Fact Sheet," 2012. As of April 22, 2016: http://www.parentsasteachers.org/images/stories/documents/Fact-Sheet_CoreCompentencies_9_6_12.pdf

PCIT International, "What Is PCIT?" undated. As of April 20, 2016: http://www.pcit.org/what-is-pcit.html

Porter-Leath, "Early Head Start, undated-a. As of April 20, 2016: http://www.porterleath.org/early-head-start

———, "Partners," undated-b. As of April 20, 2016: http://www.porterleath.org/partners

Puma, Mike, Stephen Bell, Ronna Cook, Camilla Heid, Pam Broene, Frank Jenkins, Andrew Mashburn, and Jason Downer, *Third Grade Follow-up to the Head Start Impact Study Final Report*, Washington, D.C.: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2012.

Puma, Michael, Stephen Bell, Ronna Cook, Camilla Heid, Gary Shapiro, Pam Broene, Frank Jenkins, Philip Fletcher, Liz Quinn, and Janet Friedman, *Head Start Impact Study: Final Report*, Washington, D.C.: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2010.

Raikes, Helen H., Cheri Vogel, and John M. Love, "IV. Family Subgroups and Impacts at Ages 2, 3, and 5: Variability by Race/Ethnicity and Demographic Risk," *Monographs of the Society for Research in Child Development*, Vol. 78, No. 1, 2013, pp. 64–92.

Reach Out and Read, "About Reach Out and Read," undated. As of April 20, 2016: http://www.reachoutandread.org/about-us/

Reynolds, Arthur J., *Success in Early Intervention: The Chicago Child Parent Centers*, Lincoln: University of Nebraska Press, 2000.

Shadish, William R., Thomas D. Cook, and Donald T. Campbell, *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*, Belmont, Calif.: Wadsworth Cengage Learning, 2002.

Sharif, Iman, Sarah Rieber, and Philip O. Ozuah, "Exposure to Reach Out and Read and Vocabulary Outcomes in Inner City Preschoolers," *Journal of the National Medical Association*, Vol. 94, No. 3, 2002, pp. 171–177.

Silverstein, Michael, Leslie Iverson, and Paula Lozano, "An English-Language Clinic-Based Literacy Program Is Effective for a Multi-Lingual Population," *Pediatrics*, Vol. 109, No. 5, 2002.

Substance Abuse and Mental Health Services Administration, *Parents as Teachers*, National Registry of Evidence-Based Programs and Practices, Washington, D.C.: U.S. Department of Health and Human Services, undated. As of April 20, 2016: http://legacy.nreppadmin.net/ViewIntervention.aspx?id=221

Sweet, Monica A., and Mark I. Appelbaum, "Is Home Visiting an Effective Strategy? A Meta-Analytic Review of Home Visiting Programs for Families with Young Children," *Child Development*, Vol. 75, No. 5, 2004, pp. 1435–1456.

Virginia Statewide Parent Education Coalition, *VSPEC Parent Education Referral Toolkit*, Richmond, Va., 2013.

Vogel, Cheri, Jeanne Brooks-Gunn, Anne Martin, and Mary M. Klute, "III. Impacts of Early Head Start Participation on Child and Parent Outcomes at Ages 2, 3, and 5," *Monographs of the Society for Research in Child Development*, Vol. 78, No. 1, 2013, pp. 36–63.

Wagner, Mary, Donna Spiker, F. Hernandez, J. Song, and S. Gerlach-Downie, *Multisite Parents as Teachers Evaluation: Experiences and Outcomes for Children and Families*, Menlo Park, Calif.: SRI International, 2001.

Webster-Stratton, Carolyn, "The Incredible Years Series®: A Developmental Approach," in Mark J. Van Ryzin, Karol L. Kumpfer, Gregory M. Fosco, and Mark T. Greenberg, eds., *Family-Based Prevention Programs for Children and Adolescents: Theory, Research, and Large-Scale Dissemination*, New York: Psychology Press, 2015, pp. 42–47.

Zigler, Edward, and Sally. J Styfco, *Head Start and Beyond: A National Plan for Extended Childhood Intervention*, New Haven, Conn.: Yale University Press, 1995.

About This Report

Programs that serve parents of young children aim to provide services to families to positively improve the parenting practices that children experience and influence children's development. The Urban Child Institute, a nonprofit organization in Memphis, Tennessee, has a specific focus on serving parents and children in the local community, and one way to meet this goal is through promoting effective programs. In this report, we provide an overview of outcomes associated with the rigorously evaluated parenting programs currently operating in Shelby County.

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