

Social-Emotional Development in the First Three Years

Establishing the Foundations



This issue brief, created by The Pennsylvania State University with support from the Robert Wood Johnson Foundation, is one of a series of briefs that addresses the need for research, practice and policy on social and emotional learning (SEL). SEL is defined as the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

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Executive Summary

In the first three years of life, children achieve remarkable advances in social and emotional development (SED) that establish a foundation for later competencies. Yet even in the first three years, these achievements can be threatened by exposure to elevated stresses of many kinds. Family poverty, marital conflict, parental emotional problems, experiences of trauma, neglect, or abuse and other adversities cause some infants and toddlers to experience anxious fearfulness, overwhelming sadness, disorganized attachment, or serious problems managing behavior and impulses. Programs to strengthen early SED focus on at least two people—including the child and the caregiver—because the development of healthy early SED relies on positive, supportive relationships.

This brief surveys a range of strategies to strengthen adult caregiving and improve young children's socioemotional development, with the goal of supporting the latter by strengthening the former. The strategies include home visitation programs that provide information and support to parents close to the time of a baby's birth; parent skills training programs that strengthen parental responsiveness and enhance child security and social-emotional competency; and two-generation programs like Early Head Start that provide complementary services to support both parental competencies and young children's socioemotional health. Early SED programs also include infant/early childhood mental health consultation provided to support the caregivers in early care and education programs.

Carefully designed evaluations provide evidence that these programs support early social and emotional competencies. In addition, they underscore important questions for future research, particularly concerning mechanisms of influence—how exactly the effective efforts support SED—and the optimal intensity and duration of intervention. Future research should aim to deepen our understanding of the critical ingredients for effective programs.



Introduction

Three scientific discoveries are fundamentally changing our understanding of development in the first three years.¹ First, research in developmental neuroscience has demonstrated the exceptional scope and pace of early brain development and how it is affected by experience. Second, research on early cognitive development has shown that young children's thinking is far more conceptual and analytical, and far less egocentric, than was formerly believed. Third, research on early social and emotional development shows that the first three years witnesses foundational achievements that are important to long-term social competence, and to cognitive growth and the developing brain.² Together, these discoveries underscore the significance of early experiences that have a formative influence on a wide range of developing competencies, including social, emotional, and self-regulatory skills.

Research shows that early social-emotional development is vulnerable to adversity. Many young children live in conditions that are chronically stressful, and some experience threats and traumas that imperil their ability to develop secure attachments, regulate their own behavior, and build long-term social and emotional competence. Because of the importance of the early years to enduring capacities for learning and relating to others, researchers have developed and evaluated promising programs to support healthy social-emotional development in the first three years.

This research brief examines the evidence on programs that support social and emotional development (SED) in children from birth to three, especially for those growing up in challenging conditions. A noteworthy feature of these programs, as compared to those for older children, is that the caregiver is a target of intervention as well as the young child because healthy social-emotional development depends on the quality of young children's interaction and close relationships with those who care for them.



Key Findings

Early social and emotional development establishes a psychological foundation for emerging competence across developmental domains, and is based on children's relationships with those who care for them.

In the first three years of life, children make fundamental achievements in SED.³ They develop secure attachments to caregivers, establishing a foundation of trust and assurance in being protected, nurtured, and emotionally supported, which in turn fosters social competence with peers and other adults.⁴ Infants and toddlers begin to experience a broadening range of emotions, along with an expanded understanding of the feelings and intentions of others.⁵ They develop confidence in themselves and their abilities. Young children also make significant advances in self-regulation of attention, impulses, and emotion, although there is still far to go.

Each of these achievements develops in a relational context. D. W. Winnicott famously said, "There is no such thing as a baby. . . you are describing a baby and someone."⁶ The young child's dependence on the care, protection, and solicitude of adults makes their social and emotional development and well-being contingent on the quality of their relationships with caregivers. Warm, reliable, and appropriately responsive care is associated with secure attachment, developing self-regulatory skills, and cognitive and language growth, and can have enduring impact on the child's later relationships and academic achievement.⁷ Although most caregivers are warmly responsive, this can be undermined by chronic stress, marital difficulty, depression or anxiety.⁸

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What is Social-Emotional Development for Infants and Toddlers?

The social and emotional competencies profiled in this brief are foundational achievements of the first three years of life, including the development of emotionally significant attachments to parents and other caregivers, a positive sense of self and self-confidence, a basic repertoire of social skills, emotional understanding and emotional expression, an emerging appreciation of what people are like, and simple skills in behavioral and emotional self-management. This list may seem different from the skills that are often expected of preschoolers and older children, such as taking turns, following directions, sitting still and paying attention, and making socially and morally responsible decisions. To some extent this is true, because the older and more complex self-regulatory capacities of the preschool child depend on brain regions that are still quite immature in children below the age of 3.³⁴ However, the social and emotional competencies established in the first three years create the foundation for those that follow: simple skills of self-management in toddlers provide the basis for future developments in self-regulation, for example. These early achievements are important, therefore, as the origin for the more complex social-emotional learning that comes later.

Social and emotional health is vulnerable to adversity, which affects many young children.

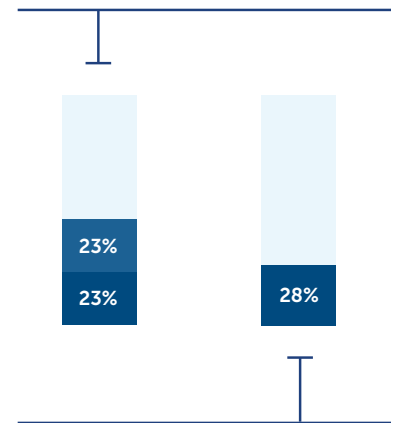
Many young children are exposed to conditions that pose significant risk to their social and emotional health. In 2015, for example, nearly a quarter of children (23%) lived in poverty during their first three years and an additional 23% lived in poor family households.^{9*} More than one-quarter (28%) of the victims of substantiated child maltreatment in 2015 were children under age 3, and the victimization rate was highest for infants younger than 1 year.¹⁰ Mothers of more than one in seven infants will experience major depression in their child's first year.¹¹ These circumstances pose direct risks to young children and undermine the nurturant support on which children ordinarily rely. These and other conditions are sometimes described as "toxic stress," because they are serious, long lasting, and can hinder healthy development. For instance, they are associated with a range of social and emotional problems in young children, including insecure or disorganized attachments to caregivers, problems in emotion management and self-regulation, the emergence of behavioral problems or withdrawn behavior, and other difficulties.¹² Exposure to such adversity contributes to the significant disparities in cognitive and language skills that can be seen by age 3, because of its effects on parents' capacities to provide enriching cognitive activities for their children, and its direct effects on brain development.¹³



What is Toxic Stress for Young Children?

The concept of "toxic stress" appears frequently in the popular media as a term describing experiences of chronic, overwhelming and/or unmanageable stress. When applied to children, typical examples include child maltreatment, exposure to domestic violence, and victimization. Yet this portrayal captures only part of the nature of toxic stress for young children. Because they depend so significantly on adults to provide protection and supportive care, experiences can be toxic to young children when they involve the deprivation or withdrawal of that nurturant care on which they rely.³⁵ Examples include child neglect (which accounts for the large majority of substantiated child maltreatment cases), a primary caregiver who is chronically depressed, and parents who are emotionally unavailable to the child because of their preoccupation with economic or legal troubles or substance abuse problems. Indeed, it is important to recognize that much of what makes stressful experiences "toxic" to a young child is having to face them alone, without the support of a protective, supportive adult. In this respect, young children can experience situations as highly stressful that an adult in the same situation might not.

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* Poor families are defined as those with incomes below 200% of the poverty level.

Research indicates that sensitive parental care can buffer the effects of adversity on young children's development. In a study of families living in rural poverty, for example, infants' chronic exposure to domestic violence was associated with elevated physiological stress reactivity by age two. But if mothers showed sensitive responsiveness to their children in earlier home observations, repeated exposure to domestic violence did not heighten children's stress reactivity.¹⁴ One implication is that enhancing the warmth and responsiveness of caregivers may provide children with valuable support, even in the face of other adversities.

High-quality, evidence-based home visitation programs can strengthen early social and emotional development by improving the quality of parental care and adult functioning.

Home visitation (HV) programs close to the time of a baby's birth are designed to provide information and support to parents. Some HV programs are targeted to first-time parents who are in poverty or economic difficulty, and some begin during pregnancy as a parent is preparing for the newborn's arrival. Their purpose is to improve early child development by strengthening parenting practices, maternal health, and social support, as well as the family's economic well-being and community connections by helping parents develop job skills and determine eligibility for other social support programs.

In the United States, HV services vary considerably in availability and quality, but the 2010 Affordable Care Act provided \$1.5 billion to states over 5 years to establish evidence-based HV programs for at-risk families with young children. This federal program, the Maternal and Infant Early Childhood Home Visiting program, or MIECHV, was reauthorized in February 2018 for the next five years at \$400 million per year. The best known and most widely available home visiting models include Healthy Families America, Parents as Teachers, and the Nurse Family Partnership.

The federal Maternal and Infant Early Childhood Home Visiting Program provides funding to states to establish evidence-based programs for at-risk families with young children.



In the Nurse Family Partnership (NFP), trained nurses offer biweekly home visits beginning during pregnancy and lasting until the child's second birthday, with an emphasis on enhancing maternal health practices, mother-infant interaction and caregiving, and family planning. First-time, low-income pregnant women and their children are the focus of the intervention. In one of several randomized controlled trials (RCT), the Denver NFP program reported improvements in mother-child responsive interaction in the intervention group over the course of the home visits. In addition, infants showed lower levels of emotional vulnerability in a laboratory assessment at age six months, as well as stronger language and cognitive development at age 2.¹⁵ In follow-up assessments, intervention group children showed fewer emotional and behavioral problems at age 6 and lower internalizing symptomatology and attentional/impulsivity problems at age 9.¹⁶

Another model, the Child FIRST (Child and Family Interagency, Resource, Support, and Training) program, is targeted to children under age 3 with identified behavioral problems and/or who are living in families with documented risk factors. It lasts six months, and combines HV services with wrap-around services coordinated by a multidisciplinary clinical team. A recent RCT showed that compared with families receiving typical services for their community, mothers in Child FIRST reported lower parenting stress at the six-month follow-up assessment. At the 12-month follow-up, children showed significant reductions in externalizing behavioral problems and better language development while their mothers reported lower levels of clinically relevant symptomatology.¹⁷

These program findings are consistent with those of other HV initiatives in documenting improvements in both parenting practices and child outcomes. However, results are often uneven across studies and programs, reflecting benefits to children and parents in some domains but no change in others.¹⁸ Because home visiting programs are generally motivated to impact a wide range of maternal and child outcomes, less is known about their specific impacts on SED, even though SED benefits have been demonstrated. Further study is needed to identify the central ingredients that optimize program impact. Among potentially important mediators of impact are parent engagement and participation, duration and intensity of visitation, training and support of home visitors, and implementation fidelity of the program model.¹⁹

New evidence-based approaches informed by attachment theory have been shown to be effective in strengthening a child's SED in the first three years by improving parental sensitive responsiveness and, through that, the security of attachment and other social-emotional capacities in young children.

Parent skills training programs can significantly improve the quality of parental care and strengthen young children's SED.

Programs to improve parenting practices with children have existed for many years.²⁰ Recently, new evidence-based approaches informed by attachment theory have been shown to be effective in strengthening a child's SED in the first three years by improving parental sensitive responsiveness and, through that, the security of attachment and other social-emotional capacities in young children.²¹ Because these programs are also designed to help parents achieve perspective on their own behavior and responses to the child, several incorporate videotaping parent-child interactions and later engaging parents in a guided discussion of those observations.

One example is the Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline (VIPP-SD), which is designed to enhance sensitive parenting and promote developmentally appropriate discipline strategies by parents of young children who face special challenges, such as those described below.²² In six sessions conducted at home over six months, home visitors record naturally occurring parent-child interactions. Each recording is carefully edited and then discussed with the parent on the next visit to convey central concepts of attachment security, sensitive responding, and appropriate discipline practices. Parents are encouraged to practice new approaches to interaction with their children during the observations. VIPP-SD has been evaluated in 12 RCTs, including with young children who were adopted or were identified as behaviorally disordered, and parents reported for maltreatment or in economic difficulty. The results found positive effects on parental sensitivity, decreases in harsh discipline, improvements in child secure attachment, and decreases in child problem behavior, with many of these outcomes sustained in follow-up studies.

Attachment and Biobehavioral Catch-up (ABC) program is a 10-session, home-based program of comparable design that has been effective with foster parents, birth parents suspected of child neglect, and internationally adoptive parents. Results show improved parental sensitivity, higher rates of child secure attachment and, in one sample of young children, changing atypical stress responses back to more normal ones.²³

The success of skills training programs for parents of infants and toddlers depends, like home visitation programs, on the capacity of the intervention to indirectly improve child SED by changing the adult's quality of care. More research is needed to better understand the central ingredients to intervention success of the video feedback procedure, especially given the surprisingly limited duration of these programs, and whether outcomes for parent and child continue to be seen in longer-term follow-up assessments.

Two-generation programs like Early Head Start offer promise for strengthening early childhood SED and parental quality of care through interventions designed for each partner.

In two-generation programs, parents and children each receive direct services on the assumption that it can be more effective to assist parents and children simultaneously with high-quality programs suited to the needs of each partner than serving them individually.²⁴ A two-generation approach is well-suited to improving SED in the early years because close relationships are essential to healthy social and emotional development. But such programs can be expensive and require careful design to ensure that parent- and child-focused components of the intervention are mutually supportive.

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Early Head Start is the best example of a two-generation program addressing SED among infants and toddlers. Early Head Start (EHS) was inaugurated in 1995 as a federal program for infants and toddlers in low-income families with the goal of enhancing children's development and strengthening families. EHS programs provide high-quality services through home visits, child care, case management, parenting education, health care and referrals, and family support. A RCT reported that in addition to cognitive and language development gains, 3-year-olds in the program showed less aggressive behavior and higher emotional engagement with parents compared to control children, and their parents were more emotionally supportive, spanked less, and provided more language and learning stimulation.²⁵ At age 5, children in EHS showed fewer social problem behaviors and more positive approaches to learning than control group children, and their parents remained significantly higher on language and learning stimulation.²⁶

These outcomes are promising, especially in the complementary changes occurring in both parenting practices and children's SED over time. It is important to determine, however, from among the full range of services, those program components that were most influential in supporting positive parenting and children's SED and their maintenance over time.

Infant/early childhood mental health consultation can support SED for young children in early care and education programs.

Infant/early childhood mental health consultation programs can strengthen the capabilities of early childhood caregivers to support a child's social-emotional development.

When infants or toddlers are in a family child care home or child care center during a major portion of the day, caregivers can be instrumental in promoting SED. This is especially true when children show behavioral problems that may result from family stress or parenting problems. In these circumstances, infant/early childhood mental health consultation programs can strengthen the capabilities of early childhood caregivers to support a child's social-emotional development. In these consultations, a clinically trained specialist works with staff to discuss and implement interventions to assist a particular child with identified problems, or to improve the program's capacity to support the healthy development of all children in the program, or both. The consultant's activities, which can last over a period of weeks or months, include focused observations of children and the classroom environment, mentoring and coaching teachers and other staff, and helping to create a plan for sustained assistance.²⁷



There are few outcome evaluations of early childhood mental health consultation²⁸ and only one published RCT. The study reported that teachers who received consultation services for about two months subsequently reported significantly lower ratings of hyperactivity, externalizing behaviors, problem behaviors, and total problems in the 3-4-year-olds of greatest concern, compared to teachers in the control condition.²⁹ A pilot study of similar design for infant mental health consultation reported decreased ratings of hyperactivity for children of greatest concern and indications of an improved classroom environment that affected non-target children as well.³⁰ These are promising results but clearly more work is needed.

Future Research Needs

The primary need for future research is to identify the core ingredients required to successfully support SED among infants and toddlers. A distinctive feature of the effective programs reviewed here is that the caregiver (usually the parent) is a primary intervention target, and thus efficacy depends on helping young children by changing parental behavior. Are there central characteristics of effective interventions (such as the intervener's capacity to engage parents, or coaching positive parenting practices, or eliciting reflective thinking) that can be identified, or do they vary according to the program design and goals?

A second future research need is how to determine optimal intensity and duration of intervention. The efficacy of short-term parent skills training programs suggests that meaningful change in parental behavior can be accomplished in weeks, but more longer-term follow-up studies of parents are necessary to determine the sustainability of these changes in parent and child behavior.

Third, the field needs much better measures of social-emotional outcomes in very young children. Compared with standardized cognitive, language, and health outcomes, assessments of program efficacy concerning SED are obscured by the need to rely on non-standardized rating scales and parental reports.

Finally, how do we better identify the infants and toddlers needing special assistance early in life? Considering how frequently programs target young children at greatest risk, this is an important consideration. One institution that provides nearly universal services to this population is pediatric practice, and there are some promising programs providing parent support and skills training through the pediatric visit, such as Healthy Steps,³¹ Durham Connects,³² and the Video Interaction Project.³³ Further evaluations of the outcomes of these programs, especially for young children, is warranted.

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Conclusions and Implications

Recent findings about the expansive growth of the brain and the mind during the first three years of life underscore that this is a foundational period for the growth of social and emotional competencies. Unfortunately, the reality is that for many infants and toddlers, social-emotional well-being is strained by exposure to significant stressors (e.g., economic difficulty, parental marital stress and depression, and other challenges) that pose risks to healthy SED.

Careful research has documented several evidence-based programs that have produced modest but meaningful gains in strengthening early social-emotional competencies by improving caregiving practices and adult-child relationships. These achievements are noteworthy because the intervention strategy is indirect—young children's security, behavioral adjustment, and other outcomes are improved by changing adult behavior—illustrating the intimate connection between a young child's social-emotional adjustment and the well-being of those who are intimately involved in the child's care. Much more remains to be understood about how early interventions of this kind can be strengthened by discerning and optimizing their most effective features. In addition, further effort devoted to identifying creative new ways of engaging families with young children in early parenting and two-generation programs is warranted.

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