

Published by
Ounce of
Prevention
Fund



Secure Attachment

Creating a Foundation for Success

As any kindergarten teacher will tell you, “readiness” for school involves more than the ability to count from one to ten or recognize colors and shapes. While these cognitive skills are important, perhaps even more significant are children’s abilities to listen and follow directions, play well with other children, focus attention on tasks, and know when they need help and how to ask for it. With a basic trust in themselves and others, children who are ready to learn arrive at school eager, curious, and attentive.

The foundation of this social and emotional competence is laid in the very first days, months, and years of life, shaped by the interactions babies have with their parents and other caring adults. Babies thrive when they are securely attached to someone special—their mother, father, or other primary caregiver—who knows and responds consistently and reliably to their unique personalities.

Unfortunately, for children born into families struggling with poverty, poor education, or mental health issues, caring and predictable relationships may take a back seat to the challenges of daily life. Parents will do the best they can, and their babies will continue to grow. Yet, infants or toddlers who are not securely attached are likely to become preschoolers unable to control their behaviors and kindergartners who have difficulty engaging in the process of learning.

We know from research that children growing up in poverty are at a greater risk of insecure attachment than children in middle-class families.¹ For these children, high-quality programs for infants, toddlers, and their families can make a significant difference in the direction of their lives—a difference that can last a lifetime.

The Origins of Secure Attachment

In the first years of life, babies embark on an amazing journey of growth and change. During this period, the foundations that support every domain of human development—physical, social, emotional, and cognitive—are established. Research confirms that children’s earliest interactions with their parents and other caregivers determine the strength and versatility of these developmental foundations.

Self-regulation and the developing sense of self

The emotional “dance” between parent and child that begins at birth teaches a child about her place in the world, who she is, and what she can expect from those around her. These lessons will eventually shape what English psychiatrist John Bowlby called the “working model of the self”—a child’s sense that “I matter” and “I can make things happen,” or, less fortunately, “I am fearful and anxious because the world is unpredictable and unsafe.”

This sense of self and self-confidence derives from the gradual shift babies make from helpless newborns totally dependent on others to regulate their behavior and emotions to toddlers who can put themselves to sleep and calm themselves when stressed, and preschoolers able to wait their turn, control their frustration, and help a friend feel less sad.

Babies are not born with the capacity to self-regulate. With their cries, and soon their smiles, they draw attention to their basic needs for nourishment and protection, and depend on those around them to meet these needs. A parent who consistently responds to a baby’s cries to be fed, changed, or comforted provides critical scaffolding for the baby’s growing ability to control her own emotions. When parents are unavailable, physically or emotionally, do not hear or understand their baby’s cues and cries, or respond in unpredictable or hurtful ways, the baby’s emerging sense of self and others is confused and insecure.

Attachment—the security, confidence, and trust that infants and toddlers have with the adults responsible for their care—is the framework within which babies develop their growing ability to regulate emotions and behavior.

All babies become attached—poorly or well—to their parents or primary caregiver. It is the *quality* of the attachment that makes a difference. A securely attached child is easy to spot: the infant who responds quickly and happily to a mother’s soothing; the toddler who wanders off from the attached caregiver to explore, but doesn’t go too far away and checks back frequently. On the other hand, children insecurely attached may never leave their caregiver’s side, or may be so concerned with the caregiver’s leaving that they cannot explore with freedom or enjoyment, yet will respond with avoidance or distress when the caregiver returns.

New research on the developing brain

Researchers have studied for decades how secure attachment develops between babies and their parents, and the influence of attachment on a baby’s ability to self-regulate. More recently, advances in brain science and imaging demonstrate that there is a physiological component to the concept of secure attachment: an infant’s early experiences affect the very architecture of the developing brain. The brain is the only organ that changes in response to experiences after birth. Its organizational structure depends on the interplay between genetic disposition and the environment. From brain imaging, we now have visual evidence that nature and nurture both shape who we become.

Like the construction of a house, brains develop from the bottom up and in a predictable sequence: connections that process more complex information are built on the lower level processes. This is as true for areas affecting emotional development as it is for areas of language and cognition. The external scaffolding created by consistent, responsive caregiving helps to form specific neurological patterns in a baby’s brain. This internal wiring in turn provides the foundation for an infant’s growing abilities to self-regulate. As babies mature, these patterns will strengthen their ability to manage the more complex emotions of toddlerhood and childhood.

Stress, and response to stress, is a part of everyday life for all of us. The ways in which we respond to stress are in part determined by genetic disposition; however, our ability to control this response and recover quickly from a stressful event is learned, beginning with our first relationships. A parent's immediate and repeated soothing when a baby is upset helps that baby move quickly from a state of heightened stress to a state of equilibrium. Eventually, the baby learns how to manage that piece of emotional regulation herself.

However, acute or chronic stress, when not mitigated by a responsive adult, is actually toxic to a baby's developing brain. Continuous stress causes the brain to release hormones that wash over the brain's neuron structure, preventing or changing neural connections. The brain becomes "stuck" in high alert, organized for survival in a threatening world. Once set, this biochemical response mechanism is very difficult to change.



The way parents are with children is how children will be with the rest of the world.

*—Dr. Karl Menninger, pioneering
20th century American psychiatrist*

A secure base for learning

The ability to control one's emotions, developed through relationships in infancy, is the first step in the creation of a securely attached child, and sets the stage for how that child will go forth into the world. A securely attached child demonstrates a set of attributes that are critical to school readiness: curiosity, willingness to explore, persistence, enthusiasm, pleasure in learning, and independence. Studies show that these social-emotional attributes are closely linked to later academic achievement. These approaches to the world are the building blocks for the skill sets every student needs to succeed academically, including problem solving, literacy, focused attention and on-task behavior, and participatory learning.

Secure attachment grows with the child, and affects relationships throughout life—with caregivers, teachers, classmates, and friends, and the intimate relationships of adults. Research has shown that the relationships children as young as 18 months have with a caregiver in a child care or early childhood setting is predictive of the relationships they will have with their elementary school teachers.²

Meeting the social and emotional needs of a mobile toddler and a verbal preschooler requires increasing parenting capacities: sensitivity to the needs of a growing child; understanding of how to use language to reason with a child; the ability to control one's own behavior and emotions; and the confidence and competence to handle each new developmental stage. These more complex caregiving skills help nurture healthy development as children move through childhood and adolescence and learn to assert their self-will, develop independent judgment, and negotiate relationships with peers and adults.

From Theory to Practice: Breaking the Cycle of Poor Attachment

Children's earliest relationships have a powerful impact, not only on the adults they will become, but on the next generation as well. Researchers have shown that adults who were securely attached have a high probability (greater than 70 percent) of providing the same secure attachment to their own children.³ Research also confirms that children in poverty are significantly more likely to be insecurely attached than the non-poor. Breaking the cycle of insecure attachment is therefore a critical strategy for breaking the cycle of poverty and ensuring that more high-risk children start school with the emotional readiness to succeed.

Beginning early

Interventions that work to break the cycle of poverty by enhancing secure attachment are most successful when they can reach at-risk families as early as possible—ideally even before a child is born. Research has found that parenting behaviors of new mothers improved to a greater extent when services began during pregnancy rather than after birth.⁴

Decades of research and practice demonstrate that **home visiting programs** are effective at reaching vulnerable families and supporting children's healthy development by enhancing parenting skills from the very beginning. Voluntary home visiting programs, often part of hospital- or community-based organizations that are known and trusted by community members, bring information and resources to families in the safety of their own homes.

Home visiting services are anchored in child development and psycho-social support to mother, baby, and extended family. Using a relationship-based model of intervention, trained home visitors, sometimes called parent coaches, focus on promoting a strong mother-infant attachment right from the start. During regularly scheduled visits, home visitors spend time listening to and getting to know parents and other family members. By developing consistent, trusting, and respectful relationships with the parents they see, home visitors model the nurturing, responsive

relationship they want parents to develop with their babies. Home visitors help new mothers learn to recognize and respond appropriately to their babies' unique personalities and develop confidence and competence in their parenting role. Home visitors also help parents to begin addressing their own needs as individuals.

Because they see families regularly, home visitors are often the first to witness and respond to emerging family concerns, such as maternal depression, child development issues, or household needs, all of which can negatively affect the developing parent-child relationship. In turn, parents, because of their trust in the home visitor, are more likely to share their own concerns and to accept linkages to other services, including center-based early childhood programs for their children, and education, job-training, and counseling programs for themselves.

Studies of home-visiting programs have shown both short- and long-term benefits:

- Participating families talk more, read more, and have more positive interactions with their children;⁵ they know more about child rearing, use more positive discipline, are more confident about parenting, and are more involved with and securely attached to their children.⁶
- Children show improved early literacy, language, problem solving, social awareness and competence, and basic skills;⁷ they demonstrate better school performance in elementary school and higher rates of high school graduation.^{8, 9}
- Participating families are more likely to have health insurance, a medical home, and have their children immunized.¹⁰ They rely less on public assistance, have healthier intervals between pregnancies and fewer subsequent births, have fewer problems with drug abuse, and less involvement in the child welfare and criminal justice systems.¹¹

The Ounce Doula Program

Since 1996, the Ounce has worked with community partners to locate specially trained home visitors—called doulas—within comprehensive community-based early childhood programs. Ounce doula programs are a targeted, short-term home visiting strategy tailored to meet the developmental needs of low-income teen parents and their newborns.

Doulas begin their relationship with expectant teens six to eight weeks before birth, and continue through labor, delivery, and the first three months of life. Their ability to establish a close and trusting relationship with teen mothers is helped by the fact that doulas are carefully selected paraprofessionals from the same community as the teens they visit, and often share similar backgrounds and life experiences.

Through weekly home visits during the last trimester, doulas help expectant mothers (and fathers when they are involved) understand and anticipate the progression of the pregnancy, the child birthing experience, and the baby's early development. Unlike other home visitors, doulas are present during labor and delivery, providing physical and emotional support to teen moms and their families; they remain after birth to encourage initial bonding, feeding, and exploration of the newborn. During the baby's first three months, doulas build on the information and support provided prenatally, continue to bolster parent-child bonding, and like all home visitors, help parents gain confidence in their developing parenting skills.

As time with the doula comes to an end, doulas help families transition to the agency's longer-term home visiting program, or to center-based services that promote healthy child development and school readiness.

Mothering the mother

For a parent who has not had a securely attached relationship in her own childhood, as many low-income teens have not, a doula offers an opportunity to break the cycle of poor attachment through the strength of the relationship she establishes with the new mother. By “mothering the mother,”¹² doulas create what researcher Mary Main has called “earned attachment”¹³—the emotional support and confidence that, if not experienced in one's own infancy, can indeed be gained from another caring relationship later in life.

“Because of all of the different things we did while I was pregnant, as soon as he was born I felt as if I already knew him. And then she [doula] held him and I called his name. Snap, just like that he turned his little head and looked me right in the eye. He knew my voice and he knew me. I’m his mom.”

—Juana, 15 years old

Begun in 1996 as a Chicago-based, privately funded pilot with support from the Irving Harris Foundation and the Robert Wood Johnson Foundation, the Ounce Doula Program is now an integral part of twenty-four family support programs throughout Illinois. This growing network of programs, funded by the State of Illinois Department of Human Services, the Illinois State Board of Education, and the Chicago Public Schools, currently serves about 1,000 pregnant women, fathers, families, and newborns each year.

The Ounce's ongoing evaluation of the doula program has shown that teen parents who work with doulas experience positive effects on breastfeeding, maternal efficacy, maternal depression, father involvement, the amount of time spent reading to their babies, and birth control use after the baby is born.



Supporting Secure Attachment Between Babies and Early Childhood Caregivers

Infants and toddlers with a history of poor attachment have much to gain from the relationships provided by high-quality center-based early childhood programs. When parents are unable to provide the consistent emotional support babies need to thrive, early childhood caregivers can offer at least one relationship that is constant, caring, and responsive. In well-designed comprehensive programs, infant/toddler caregivers provide the nurturing and stimulation that babies require, while family support workers help parents improve their parenting skills and provide access to additional services families need to create stable and safe homes. Research studies have shown that young children who receive high-quality early education do better in school academically, are better behaved in classes, are more likely to stay in school and graduate, and are less likely to need costly special education services or become teen parents.¹⁴ Later in life, they are less likely to be involved in the juvenile justice system or engage in criminal behavior.¹⁵

Highly-trained staff: the centerpiece of quality infant/toddler care

To create environments in which babies and their parents can grow and thrive, high-quality programs dedicate considerable resources to selecting and supporting educated and trained staff members, and to establishing program structures that support continuous relationship-based care.

High-quality programs are grounded in the belief that young children, families, and staff grow and learn best in the context of trusting, supportive relationships. Staff are hired with education and training in early childhood development. Equally important, programs seek staff with the interpersonal skills to forge meaningful relationships—with children and families; with fellow staff members, within and outside their discipline; and with supervisors.



The most successful staff are curious and flexible, have an interest in ongoing learning and professional growth, and bring a sense of humor to take daily challenges in stride.

Every good early childhood program views families as equal partners and tailors services to address families' comprehensive needs. Staff are trained to identify and respond to the individual strengths and challenges of each child and family, using specially designed screening and assessment tools, and skills in observation and documentation. Staff also receive training and mentoring on ways to model for parents the adult-child interactions that promote secure attachments and social-emotional growth.

To attract and retain quality staff, high-quality programs provide staff members opportunities to reflect on their work through regular supervision with highly-trained professionals, and to continue learning and growing through in-service training, access to professional consultants (e.g., physical and mental health), and on-site mentoring and coaching.

Continuity of Care: A Model to Promote Positive Infant-Caregiver Relationships

In traditional child care settings, children often move to new rooms with new teachers as they reach new developmental stages. For a child entering a center as an infant, this could mean a move at 15 months, 24 months, and then again at 36 months. Yet we know that young children do not learn well if they do not feel safe and loved, and that disruptions like these can cause loss of language and other newly-developed skills that can take weeks or months to regain. Research shows that when very young children remain with a teacher for more than a year, they are more likely to form the kind of secure relationship with their teacher that allows them to explore and learn from their environment.¹⁶

Reflecting this research and our years of experience, the Ounce and its partners in the Bounce Learning Network* are implementing a **continuity of care** service model in their Educare Centers—birth-to-five early childhood programs serving at-risk children and families. The continuity of care model minimizes disruptions to the relationship between caregivers and children, and between staff and parents, by keeping infants and toddlers with the same classroom team of teachers and peers for an extended period of time. Infants remain with the same group from entry into the program until they transition to preschool at age three; preschoolers stay together until they move to kindergarten. Within each age group, every child is assigned a primary caregiver with whom they can develop the kind of intimate and consistent relationship that supports secure attachment.

Despite some implementation challenges, the benefits of the model are many, not only for the children, but for teachers and parents as well. Continuity of care promotes secure teacher-child attachment by allowing the teacher to develop meaningful relationships with children over time, as they become familiar with each child's individual needs, skills, interests, and ways of learning. In addition to this important relationship, children develop the beginning skills of friendship and empathy by spending longer periods of time with the same group of peers.

Family-teacher relationships are strengthened as well, as parents and teachers also have more time to get to know and trust one another. Within this relationship, parents

are more likely to share concerns about their child, listen to the teacher's suggestions, and learn from observing teacher-child interactions.

Finally, the model supports teachers as professionals. It allows teachers to develop and put into practice a broader understanding of child development as they observe it first-hand over a longer period of time than in most child care settings. Anecdotal evidence suggests that teachers experience greater emotional satisfaction from the longer relationships with children and families, which may in turn lead to increased job retention, a critical goal in the field of early care and education.

**The Buffett Early Childhood Fund and the Ounce of Prevention Fund are working with partners in communities across the country to create state-of-the-art Educare Centers to better prepare young children for success in school. This network of Educare Centers—called the Bounce Learning Network—seeks to refine best practices in delivering early care and education to the nation's most at-risk children and families.*



Successful programs for young children:

- Support parents as their children’s primary nurturers, educators, and advocates through intensive, relationship-based services;
- Provide consistent and continuous support through children’s first five years of life;
- Have well-trained staff who are knowledgeable about early childhood development and are able to form trusting and nurturing relationships with parents and young children;
- Use evidence-based practices that acknowledge and support the social and emotional underpinnings of early childhood development.



Consistent and predictable relationships are the “active ingredients” of environmental influence during the early childhood years. Secure attachment fostered by these relationships is the foundational strength that determines every aspect of a young child’s development. While all parents dream of doing their best for their children, unfortunately, not all have the resources—internal or external—to realize these dreams.

High-quality home- and center-based programs for infants, toddlers, and their families provide guidance, nurturance, and support to vulnerable parents and children, and help build the base of secure attachment. Using proven strategies, high-quality programs are helping more at-risk children gain the emotional confidence and competence to enter school as ready to succeed as their more advantaged peers.

- 1 Casady, A., Diener, M., Isabella, R., and Wright, C. (2001). Attachment Security among Families in Poverty: Maternal, Child, and Contextual Characteristics. Paper presented at the 2001 Biennial Conference of the Society for Research in Child Development: www.eric.ed.gov/ERICWebPortal/recordDetail?accno=ED473457.
- 2 Hamre, B.K. & Pianta, R. C. (2001). Early teacher—child relationships and the trajectory of children’s school outcomes through eighth grade. *Child Development*, 72, 625-638; Palermo, F., Hanish, L., Martin, C., Fabes, R.A., & Reiser, M. (2007). Preschoolers' academic readiness: What role does the teacher-child relationship play? *Early Childhood Research Quarterly*, 22, 407-422.
- 3 Main, M. & Goldwyn, R. (1985). *Adult attachment classification system*. Unpublished manuscript, University of California, Berkeley.
- 4 Administration for Children and Families (2006). *Preliminary Findings from the Early Head Start Prekindergarten Follow-up*. Washington, DC: U.S. Department of Health and Human Services. www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html.
- 5 Chambliss, J. & Emshoff, J. (1997). The Evaluation of Georgia’s Healthy Families Programs; Katzev, A., Pratt, C., & McGuigan, W. (2001). Oregon Healthy Start 1999-2000 Status report; Galano, J. & Huntington, L. (1997). Year V Evaluation of the Hampton, Virginia Healthy Families Partnership; Kamerman, S.B. & Kahn, A.J. (1995). *Starting Right*, New York: Oxford University Press; Wagner, M. & Spiker, D. (2001). Multisite Parents as Teachers Evaluation: Experience and Outcomes for Children and Families; Administration for Children and Families (2003). *Research to Practice: Early Head Start Home-Based Services*, Washington, DC: DHHS, www.acf.hhs.gov/programs/core/ongoing_research/ehs/ehsintro.html.
- 6 Pfannenstiel, J. & Seltzer, D. (1989). New Parents as Teachers: Evaluation of an Early Parent Education Program, *Early Childhood Research Quarterly*, 4, 1-8; Wagner, M., Iida, E., & Spiker, D. (2001). The Multisite Evaluation of the Parents as Teachers Home Visiting Program: Three Year Findings from One Community; Administration for Children and Families (2003). *Research to Practice: Early Head Start Home-Based Services*, Washington, DC: DHHS, www.acf.gov/programs/core/ongoing_research/ehs/ehsintro.html; Galano, J. & Huntington, L. (1997). Year V Evaluation of the Hampton, Virginia Healthy Families Partnership; LeCroy & Milligan Associates, Inc. (2001). Healthy Families Arizona Evaluation Report; McLaren, L. (1988). Fostering mother-child relationships, *Child Welfare*. 67, 353-365.
- 7 Administration for Children & Families (2003). *Research to Practice: Early Head Start Home-Based Services*, Washington, DC: DHHS, www.acf.hhs.gov/programs/core/ongoing_research/ehs/ehsintro.html; New York University Study on School Readiness of Parent-Child Home Program Participants (2003); Coleman, M., Rowland, B., & Hutchins, B., Parents as Teachers: Policy Implications for Early School Intervention. Paper presented at the 1997 annual meeting of the National Council of Family Relations, Crystal City, VA, November 1997.
- 8 Drazen, S. & Haust, M., Lasting academic gains from an early home visiting program. Paper presented at the annual meeting of the American Psychological Association, August 1996; Levenstein, P., Levenstein, S., & Oliver, D. (2002). First grade school readiness of former child participants in a South Carolina Replication of the Parent-Child Home Program, *Applied Developmental Psychology*, 23, 331-353.
- 9 Levenstein, P., Levenstein, S., Shiminski, J. A., & Stolzberg, J. E. (1998). Long-term impact of a verbal interaction program for at-risk toddlers: An exploratory study of high school outcomes in a replication of the Mother-Child Home Program, *Journal of Applied Developmental Psychology*, 19, 267-285.
- 10 Berkenes, J. P. (2001). HOPES Healthy Families Iowa FY 2001 Services Report; Klagholz & Associates (2000). Healthy Families Montgomery Evaluation Report Year IV; Greene, et al. (2001). Evaluation Findings of the Healthy Families New York Home Visiting Program; Katzev, A., Pratt, C., & McGuigan, W. (2001). Oregon Healthy Start 1999-2000 Status Report.
- 11 Holtzapple, E. (1996). State of Arizona Office of the Auditor General, Performance Audit, Annual Evaluation: Healthy Families Pilot Program; Nelson, C., Gordon, T., & Hoffman, K. (2000). Healthy Families Pinellas Evaluation; Williams, Stern & Associates, Healthy Families Florida Statewide Evaluation: Summative Report (2002).
- 12 Klaus, M.H., Kennel, J.H., & Klaus, P.H. (1993). *Mothering the Mother*. New York, NY: Addison-Wesley Publishing.
- 13 Siegel, D.J. & Hartzell, M. (2003). *Parenting from the Inside Out*. New York, NY: Penguin Group (USA).
- 14 Frank Porter Graham Child Development Center. (1999). *Early Learning, Later Success: The Abecedarian Study, Highlights of the Age 21 Follow-up Study*, Chapel Hill: University of North Carolina.
- 15 Lally, R. J., Mangione, P. L., and Honig, A. S. (1987). The Syracuse University Family Development Research Program: Long-Range Impact of an Early Intervention with Low-Income Children and Their Families, Center for Child & Family Studies, Far West Laboratory for Educational Research and Development. San Francisco, CA.
- 16 Raikes, H. (1993). Relationship Duration in Infant Care: Time with a High-Ability Teacher and Infant-Teacher Attachment. *Early Childhood Research Quarterly*, 8, 309-325.

Additional References

National Scientific Council on the Developing Child, Working Paper No. 1. (Summer 2004). Young Children Develop in an Environment of Relationships; Working Paper No. 2 (Winter 2004). Children’s Emotional Development is Built into the Architecture of the Brain, Cambridge, MA.

Appleyard, K. & Berlin, L. J. (Spring 2007). Supporting healthy relationships between young children and their parents: Lessons from attachment theory and research, Center for Child and Family Policy, Duke University: www.childrenandfamilypolicy.duke.edu.

Yarbrough, K. (2005). *The First Days of Life: Adding Doulas to Early Childhood Programs*, Ounce of Prevention Fund: Chicago, IL.

Lessen-Firestone, J. (1999). *Building Children’s Brains*. Oakland Schools. Waterford, MI.

the Ounce

Ounce of Prevention Fund
33 West Monroe Street, Suite 2400
Chicago, IL 60603
Telephone 312.922.3863
www.ounceofprevention.org