

Parents' Views of Early Social and Emotional Development

More and Less Than Meets the Eye

EMILY K. NEWTON
ROSS A. THOMPSON

University of California, Davis

All parents have concerns about their children's development. Is my child always going to bite people when she gets mad? Will he always have these tantrums? Is she learning the skills necessary to do well in school? All of these concerns relate to how children typically develop. When parents are equipped with information about child development and the age ranges in which we expect certain developments to occur, much of this worry can be alleviated. In addition, when parents know what they can do to help their child learn or develop social and emotional skills, they have some appropriate influence over their child's development.

All parents have concerns about their children's development. Is my child always going to bite people when she gets mad? Will he always have these tantrums? Is she learning the skills necessary to do well in school? All of these concerns relate to how children typically develop. When parents are equipped with information about child development and the age ranges in which we expect certain developments to occur, much of this worry can be alleviated. In addition, when parents know what they can do to help their child learn or develop social and emotional skills, they have some appropriate influence over their child's development.

One of the take-home messages from the ZERO TO THREE *Parenting Infants and Toddlers Today* poll is that parents have an excellent understanding of some specific strategies to support their children's development. Parents understand that reading to their children and having a language-rich environment promotes cognitive development. They also know

that social experiences, such as playing with other children, are important for social and emotional growth and that warm parenting—characterized by comforting children and setting clear rules and limits—can help foster social and emotional development. Parents were also exceptionally good at answering questions phrased as hypothetical stories, where their knowledge of child development was applied to specific situations. They recognized, for example, that a toddler might venture into forbidden areas out of curiosity, not willful disobedience, and that a shy child should be coaxed, not forced, to socialize with peers. Thus, parents understand some wonderful strategies for helping their children grow socially and emotionally, and they are adept at applying these strategies in hypothetical stories that mimicked typical real-life situations.

Although the majority of parents understand some important ways to promote development, their understanding of the developmental milestones related to social

and emotional development is less consistent. Parents seem to be *underestimating* the emotional and psychological abilities of their young infants yet *overestimating* the self-regulatory abilities of their toddlers. On one hand, many parents reported that they did not think young infants could feel sadness or fear or that they could sense sadness or anger in their caregivers. However, research has shown that infants are capable of expressing

Abstract

Parents responding to the ZERO TO THREE *Parenting Infants and Toddler Today* poll showed excellent understanding of early childhood development, but they also underestimated young infants' emotional sensitivity and overestimated toddlers' capacities for self-regulation. This article reviews these results along with research findings on the complex emotional lives of infants, the ways that caregivers' emotions affect development in the first months of life, the development of self-awareness, and the extended period of time necessary for developing self-regulation in the preschool years. The importance of attuning to infants' internal experiences and of facilitating the development of self-regulatory skills with warm and consistent caregiving is also discussed.

and responding to these emotions in the first months of life. In addition, infants' emotional well-being seems to be linked to the sadness and anger expressed by their parents. On the other hand, many parents expected that children could control their emotions and share and take turns with other children by age 3. However, research on emotion regulation and studies of brain development indicate that these are, at best, very early emerging abilities at this age. By sharing information with parents about social and emotional milestones, and the developmentally appropriate ways of dealing with common social and emotional issues in the first 3 years of life, we can support and empower their parenting efforts.

The Emotional and Psychological Life of the Infant

THE MAJORITY OF parents responding to the parent poll reported that children under the age of 6 months do not experience sadness and fear and that children under the age of 6 months do not sense when parents are angry or sad and, thus, are not affected by their parents' negative emotions. Nearly 55% of parents believe that children do not feel good or bad about themselves until after the age of 2, some of them thinking that this occurs much later. These findings reflect a general underestimation of the depth of the psychological and emotional life of the infant. Infants are capable of feeling and sensing a wide range of emotions in the first few months of life, and the impact of parents' emotions on young infants is incredibly powerful. In fact, if parents express fear or sadness at high levels because of marital conflict or depression, the parent-child relationship can be disrupted and children can develop affective difficulties of their own. A substantial amount of research has been conducted on social and emotional development in infancy, showing that young infants have remarkably rich emotional lives and that parents' awareness of their infants' emotions and perceptions is important for their social and emotional well-being.

Emotional Experiences in Infancy

A young infant's world is filled with loud noises, unexpected events, and new faces. The infant is constantly experiencing new and interesting sensations and emotions. Although we think of young infants as buffered from stress by their psychological immaturity, research shows us that this is far from true. Young infants experience joy and interest but also sadness and anger early in the first year of life, and their facial expressions reflect these distinct emotions by 2 ½ months of age (Izard et al., 1995). Infants' facial expressions of fear seem to appear later, between 4 and 6 months, although



Photo: © iStockphoto.com/Yu Liang Wong

Young infants experience joy and interest, as well as sadness and anger, early in the first year of life.

they may actually begin to feel fearful earlier (Sullivan & Lewis, 1998). In the early months, infants express their fear in a variety of ways, including disengaging from a fearful situation by redirecting their attention or by showing general distress. For example, a young infant may respond with a look away or become generally distressed when a large dog quickly approaches rather than showing a typical "fear" facial expression. Young infants may cling on to a parent or hide their face in a parent's shoulder when startled by a loud noise. Later in the first year, infants are more likely to show facial expressions of fear in these expected situations (Bennet, Bendersky, & Lewis, 2005).

It is possible that parents of very young infants do not think they experience sadness or fear because infants do not show a typical "fear face." It is clear, however, from research on children's behavioral responses (e.g., turning away from frightening noises and situations) that they are experiencing fear and sadness before 6 months of age.

Infants Detect Others' Emotions

When a newly crawling 8-month-old reaches a downward slope in the grass, he looks back to his caregiver with a look of apprehension. The caregiver expresses a warm smile and cheerful words, and the infant smiles and cautiously crawls down the slope. When infants reach this age, parents seem to be aware that their infants perceive others' emotions, yet parents are less likely to think

this is so of their younger infants.

Parents responding to the parenting poll reported that they did not think very young infants could detect sadness and anger in their parents. Although it may not be apparent to parents in their daily interactions with infants, infants are very sensitive to parents' emotional expressions. In fact, infants are most sensitive to the emotional expressions of the adults with whom they are in contact the most (Kahana-Kahlman & Walker-Andrews, 2001). Infants can detect differences in their mothers' facial and vocal expressions of sadness, anger, and joy as early as 10 weeks of age. Infants respond to their parents' expressions of joy with joyful expressions of their own, they respond to parents' anger expression with distress or with similar looks of anger, and they respond to their parents' expressions of sadness by moving their mouths or sucking their thumbs, perhaps showing that they are trying to comfort themselves (Haviland & Lelwica, 1987). As they get older, infants continue to show different responses to the facial and vocal expressions of emotion in their parents and in unfamiliar adults (Montague & Walker-Andrews, 2001; Termine & Izard, 1988). In everyday situations, of course, young infants are responding to the combination of facial and vocal expressions of emotion in an adult, such as an adult's angry tone of voice and mad facial expression. By 5 months, infants can tell the difference between joyful and angry vocal expressions alone (Fernald, 1993).



Even in typical daily interactions, children detect, and are emotionally affected by, their parents' emotional expressions.

When infants are not yet mobile, they spend a good deal of time in face-to-face interaction with their parents and primary caregivers. These experiences of give-and-take are important ones for emotional development. Infants begin to see that their own expressions of happiness or distress are met with similar, contingent responses from others. These experiences validate the infant's own emotional experiences as well as teach her about other people's emotions. For example, an infant's expressions of sadness or distress may be met by the adult's initial looks of concern, followed by looks of happiness as the adult attempts to bring the child back to a happy mood. Through these experiences, the infant may learn some rudimentary aspects of emotion regulation as the adult manages the child's feelings. They also develop confidence in the emotional responsiveness of their caregivers.

By the time infants are mobile, they are able to use their parents' and caregivers' emotional expressions to help them navigate their environments. As described in the aforementioned example, an infant may look to a parent or caregiver when he approaches new physical obstacles, but he might also do so when encountering novel social situations or when he wants something that is off limits (e.g., pulling on the living room curtains). In what researchers call *social referencing*, infants look to the parent or caregiver in uncertain

circumstances and use the adult's facial expression to guide their subsequent behavior (Moses, Baldwin, Rosicky, & Tidball, 2001). Social referencing shows that infants detect emotions in adults and that their behavior is affected by the adults' emotions.

Infants Are Affected by Others' Emotions

In reporting that young children do not perceive parents' sad and angry emotions, parents were also indicating that young children would not be affected by their parents' negative emotions. Researchers have shown that infants are sensitive to these emotions in circumstances when they are typically expressed by parents and also when they are symptoms of an adult mental health concern. As noted earlier, very young infants respond to parents' expressions of sadness and anger emotionally: They turn away or self-comfort when they see their parents behaving sadly, and they express distress when their parents are angry (Haviland & Lelwica, 1987; Montague & Walker-Andrews, 2001). Therefore, even in typical daily interactions, children are emotionally affected by their parents' emotional expressions. These occasional experiences of parental negative emotion may not be detrimental to infants' well-being (although parents should be aware that their emotions can have an effect on their young children), but persistent expressions of anger or sadness could lead to relational and affective problems in very young children, and in some cases, these could lead to more serious problems that persist throughout childhood and into adulthood without appropriate intervention.

Maternal depression has been widely studied in relation to infants' emotional development. Maternal depression affects between 10% and 20% of mothers every year. Researchers have found that children raised by a depressed mother have differences in brain development, physical development, and emotional development when compared with children raised by a mentally well mother (National Scientific Council on the Developing Child [NSCDC], 2010). These differences begin very early in life. Parents and caregivers experiencing depression may express high levels of sadness, and they may withdraw from interaction with their infants, leading their infants to be more withdrawn than typical infants during face-to-face interactions with the parent and with other nondepressed adults (Field et al., 1988). In addition, infants of depressed parents show different brain activity patterns that are characteristic of emotional sadness and social withdrawal (Field & Diego, 2008). Thus, infants seem to be developing a way of interacting with others based on their

experiences of interacting with a depressed parent. It appears that infants of depressed mothers are, in fact, showing behavioral and brain patterns that are similar to those characteristic of depression.

Infants' early experiences of disrupted interactions with a depressed mother can lead to potential mental health concerns (NSCDC, 2010). Infants of depressed mothers are more likely to be depressed or anxious later in life than infants of mentally well mothers. The best intervention for a depressed mother and her child is one that targets their relationship by enabling mothers to tune in and interact more positively with her infant. Although treatment for the mother alone can alleviate some of her symptoms of depression, these treatments do not seem to affect the child in the same way that relationship-based treatments do (Nylen, Moran, Franklin, & O'Hara, 2006).

Infants are also sensitive to parents' expressions of anger. Infants exposed to parents' frightening behaviors (e.g., angry outbursts, high levels of physical or emotional parental conflict, or child-directed abuse) can develop disorganized attachments with those parents. The trust that infants typically develop in their parents does not develop, and infants in these situations both fear and need their parents, leading them to respond to parents fearfully (Bernier & Meins, 2008). Children who develop these types of disorganized relationships with their parents early in life are more likely to develop behavior problems later in childhood (Lyons-Ruth, Easterbrooks, & Cibelli, 1997; Madigan, Moran, Schuengel, Pederson, & Otten, 2007). It is difficult to know exactly how children's disorganized relationships lead to behavior problems, but it is likely due to the lack of typical emotional and social experiences early in the first years of life. When parents do not engage in the positive emotional give-and-take characteristic of early interactions and help children to understand and manage their emotions through these exchanges, it is more likely that children will lack healthy, constructive self-regulatory skills in the following years. Researchers are continuing to investigate the pathways from frightening parenting to disorganized attachments to behavioral outcomes (Bernier & Meins, 2008; Thompson & Raikes, 2003). It is important to note, however, that excessive amounts of anger in the infant's early life can have long-lasting detrimental effects on how they relate to other people.

Young Children Feel Good and Bad About the Self

In a classic experimental task of self-recognition, the child's mother places a spot of rouge on a child's nose. If the child is older

than 15 or 16 months of age, she will touch her nose when she sees her reflection in a mirror. This shows that she recognizes that the reflection in the mirror is herself and not some other child. She might also run to the mother and put her face in her mother's lap. She might cover her face and turn away from other people in the room. She might bite her lip and giggle. These are all signs that she is feeling embarrassed about how the spot changed her appearance. Although we often think of young children as lacking the ability to self-reflect, they are actually quite capable of feeling embarrassed when they encounter unexpected attention from other people. They are also capable of feeling guilty when they do something that is socially unacceptable and proud when they accomplish a difficult task.

Self-representation—the idea of “me”—develops late in the second year of life (Lewis, 2003). As certain areas of the brain mature (most notably, the temporo-parital junction), children begin to recognize that they are individuals distinct from other people (Lewis & Carmody, 2008). As self-representation develops, children begin to make rough comparisons between their own behaviors and the standards and behaviors of others, leading to the expression of self-conscious emotions such as pride, guilt, embarrassment, and shame late in the second year (Barrett, 2005). Children as young as 17 months of age show signs of embarrassment and guilt when they engage in socially unacceptable behaviors, such as breaking something of value (Barrett, 2005). They also show clear expressions of pride when their actions or creations (e.g., a drawing) are praised by another. Thus, young toddlers can feel good or bad about themselves from a remarkably early age, and this ability is closely related to their developing sense of self.

Self-conscious emotions are, by nature, rooted in young children's relationships with the important people in their lives (Lagattuta & Thompson, 2007). For a child to feel guilt or pride, he must understand that the important adults in his life have external standards for his behavior. A rudimentary foundation for this understanding can be seen in social referencing. Through social referencing, infants begin to understand that others have important emotions related to shared events and experiences. As children begin to gain a sense of self throughout the second year of life, they recognize that their parents' and caregivers' emotional responses are judgments of their own behaviors. When a child builds a tower of blocks, the caregiver celebrates! When a child dumps a bowl of cereal on the floor, the parent admonishes him. Children's self-conscious emotions are directly related to the ways in which parents and caregivers have repeatedly

responded to the child's approved and disapproved behaviors. Indeed, parents' gentle reinforcement of their standards is associated with children's expression of self-conscious emotions, attempts to master difficult tasks, and appeals to the parent for feedback (Barrett, 2005). As children approach the end of the second year, they have internalized some of their caregivers' standards for behavior, and their experience of self-conscious emotions reflects this.

The Self-Regulatory Skills of the Toddler

IMAGINE A 3-YEAR-OLD at preschool. She is new to preschool, and initially her tears flow freely when her father leaves her there for the day. She sees a favorite toy across the room and picks it up. Another child snatches it out of her hand. She dissolves into tears again. Imagine the same child 1 year later as a 4-year-old. She has adjusted to the preschool environment, and she gives her father a small wave and kiss at the door as she runs over to the dramatic play area. When another child snatches the pilot's hat from her hands, she tells the child, “I wasn't done with that!” and they begin a hunt for more hats. Soon they are both pilots flying the air-

plane, wearing matching pilot hats. These two different responses reflect both a maturation of skills and the importance of context for self-regulation. When young children are stressed or tired—just like when adults are stressed or tired—they will be less able to regulate their emotions. When young children are very young, they will also be less able to regulate their emotions.

Parents were most concerned about their children's temper tantrums and children's abilities to control their emotions, according to the ZERO TO THREE parent poll. These behaviors, along with children's biting, fighting, and hitting, were among the greatest child-rearing challenges that parents identified, and each relates to developing self-regulation of young children. It is interesting, however, that parents also seemed to have higher expectations than appropriate for children's self-regulatory abilities. Many parents reported that children under the age of 3 can control their emotions when frustrated, and most parents thought that children under the age of 3 could share and take turns with other children. In fact, experts agree that children cannot do either of these things until they are between the ages of 3 to 5, and because there are individual



Photo: © iStockphoto.com/Ronit Serti

Parents support their child's social and emotional development by tuning in to her internal experiences.

differences in self-regulation, many children may not have these skills until kindergarten. A network of brain areas and behavioral abilities must develop before children are capable of controlling their emotions in basic ways or sharing with peers. Parents' perceptions of their greatest parenting challenges—temper tantrums, controlling emotions, and minimizing aggression—may be closely linked to their overestimation of what children should be able to do at these ages. They wish that their young children would quickly learn to manage these problem behaviors themselves.

Children have some important self-regulatory abilities before the age of 3. Biological maturation and brain development help infants shift from erratic sleep cycles to a typical day-and-night routine (Diamond, 2002; Posner & Rothbart, 2006). Toddlers can explore toys for sustained periods, and they can occasionally change their behavior when parents give warnings. By the age of 3, children can focus their attention for longer periods and follow simple instructions (Bronson, 2001). By the age of 5, children can solve problems and plan their activities ahead of time, which allows them to engage in complex

pretend play and control their impulses by logically thinking things through, resulting in fewer peer conflicts. These emergent abilities quickly break down, however, if children are overly stressed or tired (Bronson, 2001).

The brain regions governing self-regulation do not fully mature until early adulthood. Indeed, certain areas of the prefrontal cortex necessary for controlling one's behaviors and making responsible decisions do not fully develop until people are in their 20s. The expectation that young children will be able to control their impulses or manage their emotions, especially during stressful events (e.g., when children are frustrated or upset) is misplaced. So what needs to develop for children to have some of these skills by the time they enter kindergarten, and how can adults be helpful in this developing process?

The Many Components of Self-Regulation

Self-regulation is not a single thing that develops in isolation. A network of developing abilities must coordinate for a young child to stifle a temper tantrum, share an item he wants to keep using, or make a plan. Only as several aspects of self-regulation develop—inhibition, working memory, and cognitive flexibility—can a young child start to gain control of the emotional responses that first rise to the surface during challenging moments (Thompson, 2009). *Inhibition* is the ability to stop an automatic response, such as the emotional reaction of someone grabbing a desired toy from another child's hands. Consider the game of Simon Says. Many preschoolers will not be able to inhibit the action of touching their head when they hear, "Touch your head," even though Simon did not say it. By the age of 5, most children can capably inhibit these responses. *Working memory* is another important aspect of self-regulation. Without keeping a certain amount of information in mind and manipulating it, children cannot plan their responses or their solutions to social and cognitive problems (e.g., devising a plan to share a toy or take turns with it). *Cognitive flexibility*—or the ability to change perspective, attention, or focus—is a key component to regulating one's behaviors. A child engaging in a temper tantrum is usually unable to shift their attention to a new thing (e.g., "You can't have the candy bar in the store, but you can have a fruit snack when we get home") or take the perspective of another (e.g., "It's really embarrassing for me when you do this in public"). All three of these aspects of self-regulation are important for young children to control their emotional and social responses in socially appropriate ways. Understanding the complexity and the extended timeline

of the development of self-regulation can help parents and caregivers support the development of these skills in young children.

Warm, responsive parenting characterized by appropriate rules and structure are key for the development of self-regulation. Mothers who are more responsive have children who are better able to control their behaviors (Kochanska, Murray, & Harlan, 2000; Spinrad et al., 2007). Children's emotion regulation is influenced by parents' sensitive responses to their feelings, constructive parent-child conversations about emotions, and a family emotional climate with manageable expectations of children's emotions (Thompson & Meyer, 2007). It is important for parents and caregivers to assist children in their self-regulatory efforts by validating their emotions, talking constructively about emotions and emotional situations, and creating manageable emotion expectations based on children's existing abilities.

Tuning in to Young Children's Social and Emotional Experiences

ONE OF THE most important ways for parents to support children's social and emotional development is by tuning in to their child's internal experiences. Rather than perceiving the baby as a thing that needs constant attention and care, parents can tune in to the inner social and emotional experiences of that infant and recognize that the baby is a small person with an emotional and psychological life and who is vulnerable to social and emotional difficulties. The brain—and the self-regulatory skills that develop as the brain develops—grows within an environment of important and meaningful relationships. Children's experiences with parents, caregivers, and peers are important contributors to how and when social and emotional milestones are reached.

An important influence on children's emotional and psychological understanding, as well as their self-regulatory skills, is how the parent-child relationship functions very early in life. Parents who are more tuned in to their infant's internal lives will have more socially and emotionally competent young children. *Maternal mind-mindedness*—mothers' recognition that their infants have mental lives—is a key contributor to infants' growing psychological well-being (Meins et al., 2003). Mothers who are tuned in to what their infants want, need, and understand are more likely to have infants who bond closely with them and grow to understand the mental lives of others (Meins et al., 2002). *Mothers' insightfulness*—their ability to consider the perspective of the infant and empathize with that perspective—also relates to how their infants develop relationships with them and develop social and emotional skills. Mothers who are more

Learn More

Publications

SELF-REGULATION IN EARLY CHILDHOOD:

NATURE AND NURTURE

M. B. Bronson (2000)

New York: Guilford

THE AMAZING INFANT

T. Field (2007)

New York: Wiley-Blackwell

THE EMOTIONAL LIFE OF THE TODDLER

A. F. Lieberman (1995)

New York: Free Press

FROM NEURONS TO NEIGHBORHOODS:

THE SCIENCE OF EARLY CHILDHOOD

DEVELOPMENT

National Research Council & Institute of Medicine (2000). In J. P. Shonkoff & D. A. Phillips (Eds.), *Board on Children, Youth, and Families; Commission on Behavioral and Social Sciences and Education*

Washington, DC: National Academy Press

THE DEVELOPING MIND [THEME ISSUE]

Zero to Three Journal (2008, May), 28(5)

Web Site

NATIONAL SCIENTIFIC COUNCIL ON THE

DEVELOPING CHILD

www.developingchild.net


insightful are also more sensitive caregivers, and they are more likely to have infants with secure attachments (Koren-Karie, Oppenheim, Dolev, Sher, & Etzio-Carasso, 2002). Attuning to an infant's internal world can help parents develop reasonable expectations of young children's developing skills, as well as promote a sensitive and responsive relationship.

Conclusion

PARENTS RESPONDING TO the ZERO TO THREE *Parenting Infants and Toddlers* poll showed an interesting and unexpected pattern of responses. Parents are underestimating their young infants' emotional and psychological experiences, but they are overestimating their toddlers' self-regulatory skills. These findings are illuminated by parents' reports of their biggest concerns about their young infants—tantrums, biting, hitting, problems with sharing. All of these issues relate to toddlers' self-regulatory skills. However, parents may also be missing the influence of the emotional climate of the family on infants' emotional growth. Taken together, these responses sug-

gest a need for greater understanding of early social and emotional milestones and offers promise for the benefits that greater information and understanding might provide to developing parent-child relationships.

Infants and toddlers have rich psychological and emotional lives, yet they are still developing important skills for harnessing their psychological and emotional knowledge. Infants have amazing abilities to read and respond to their own and others' emotions, but the skills necessary for controlling those emotions and behaviors require a substantial period of time to develop. They are remarkably vulnerable to their parents' and caregivers' responses to them and to disruptions of their environments. By tuning into their infants' rich psychological and emotional experiences, parents can become more aware of the skills and challenges of emotional and social development and help facilitate the skills necessary for emotion regulation and self-regulation. By helping parents recognize the emotional and social skills of the young infant and the burgeoning self-regulatory skills of the toddler, we can empower them with an

understanding of typical development that will allow them to support their children's social and emotional development. 

EMILY K. NEWTON is a doctoral student in psychology at the University of California, Davis, where she studies how early relationships influence emotional and social development in infancy and toddlerhood. She holds an MA in Child Development from California State University, Sacramento. Before entering the doctoral program, she worked as the infant head teacher at the Early Childhood Lab School at the University of California, Davis.

ROSS A. THOMPSON, PhD, is professor of psychology at the University of California, Davis. As director of the Social and Emotional Development Laboratory, he studies parent-child relationships and the growth of psychological understanding in young children, including emotion understanding, conscience development, and self-awareness. He also works on the applications of developmental science to public policy, including school readiness, early childhood mental health, and early intervention.

References

- BARRETT, K. C. (2005). The origins of social emotions and self-regulation in toddlerhood: New evidence. *Cognition and Emotion*, 19, 953-979.
- BENNETT, D. S., BENDERSKY, M., & LEWIS, M. (2005). Does the organization of emotional expression change over time? Facial expressivity from 4 to 12 months. *Infancy*, 8, 167-187.
- BERNIER, A., & MEINS, E. (2008). A threshold approach to understanding the origins of attachment disorganization. *Developmental Psychology*, 44, 969-982.
- BRONSON, M. B. (2001). *Self-regulation in early childhood: Nature and nurture*. New York: Guilford.
- DIAMOND, A. (2002). Normal development of prefrontal cortex from birth to young adulthood: Cognitive functions, anatomy, and biochemistry. In D. T. Stuss & R. T. Knight (Eds.), *Principles of frontal lobe function* (pp. 466-503). New York: Oxford University Press.
- FERNALD, A. (1993). Approval and disapproval: Infant responsiveness to vocal affect in familiar and unfamiliar languages. *Child Development*, 64, 657-674.
- FIELD, T., & DIEGO, M. (2008). Maternal depression effects on infant frontal EEG asymmetry. *International Journal of Neuroscience*, 118, 1081-1108.
- FIELD, T., HEALY, B., GOLDSTEIN, S., PERRY, S., BENDELL, D., SCHANBERG, S., ET AL. (1998). Infants of depressed mothers show "depressed" behavior even with nondepressed adults. *Child Development*, 59, 1569-1579.
- HAVILAND, J. M., & LELWICA, M. (1987). The induced affect response: 10-week-old infants' responses to three emotion expressions. *Developmental Psychology*, 23, 97-104.
- IZARD, C. E., FANTAUZZO, C. A., CASTLE, J. M., HAYNES, O. M., RAYIA, M. F., & PUTNAM, P. H. (1995). The ontogeny and significance of infants' facial expressions in the first 9 months of life. *Developmental Psychology*, 34, 997-1013.
- KAHANA-KALMAN, R., & WALKER-ANDREWS, A. S. (2001). The role of person familiarity in young infants' perception of emotional expressions. *Child Development*, 72, 352-369.
- KOCHANSKA, G., MURRAY, K. T., & HARLAN, E. T. (2000). Effortful control in early childhood: Continuity and change, antecedents, and implications for social development. *Developmental Psychology*, 36, 220-232.
- KOREN-KARIE, N., OPPENHEIM, D., DOLEV, S., SHER, E., & ETZION-CARASSO, A. (2002). Mothers' insightfulness regarding their infants' internal experience: Relations with maternal sensitivity and infant attachment. *Developmental Psychology*, 38, 534-542.
- LAGATUTTA, K., & THOMPSON, R. A. (2007). The development of self-conscious emotions: Cognitive processes and social influences. In R. W. Robins & J. Tracy (Eds.), *Self-conscious emotions* (2nd ed., pp. 91-113). New York: Guilford.
- LEWIS, M. (2003). The emergence of consciousness and its role in human development. *Annals of the New York Academy of Sciences*, 1001, 104-133.
- LEWIS, M., & CARMODY, D. P. (2008). Self-representation and brain development. *Developmental Psychology*, 44, 1329-1334.
- LYONS-RUTH, K., EASTERBROOKS, M. A., & CIBELLI, C. D. (1997). Attachment strategies, infant mental lag, and maternal depressive symptoms: Predictors of internalizing and externalizing problems at age 7. *Developmental Psychology*, 33, 681-692.
- MADIGAN, S., MORAN, G., SCHUENGEL, C., PEDERSON, D. R., & OTTEN, R. (2007). Unresolved maternal attachment representations, disrupted maternal behavior, and disorganized attachment in infancy: Links to toddler behavior problems. *Journal of Child Psychology and Psychiatry*, 48, 1042-1050.
- MEINS, E., FERNYHOUGH, C., WAINWRIGHT, R., CLARK-CARTER, D., DAS GUPTA, M., FRADLEY, E., ET AL. (2003). Pathways to understanding mind: Construct validity and predictive validity of maternal mind-mindedness. *Child Development*, 74, 1194-1211.
- MEINS, E., FERNYHOUGH, C., WAINWRIGHT, R., DAS GUPTA, M., FRADLEY, E., & TUCKEY, M. (2002). Maternal mind-mindedness and attachment security as predictors of theory of mind understanding. *Child Development*, 73, 1715-1726.
- MONTAGUE, D. P. F., & WALKER-ANDREWS, A. S. (2001). Peekaboo: A new look at infants' perception of emotion expressions. *Developmental Psychology*, 37, 826-838.

MOSES, L. J., BALDWIN, D. A., ROSICKY, J. G., & TIDBALL, G. (2001). Evidence for referential understanding in the emotions domain at twelve and eighteen months. *Child Development, 72*, 718–735.

NATIONAL SCIENTIFIC COUNCIL ON THE DEVELOPING CHILD. (2010). *Maternal depression can undermine the development of young children*. Cambridge, MA: Harvard University. Retrieved from http://developingchild.harvard.edu/library/reports_and_working_papers/working_papers/wp8/

NYLEN, K. J., MORAN, T. E., FRANKLIN, C. L., & O'HARA, M. W. (2006). Maternal depression: A review of relevant treatment approaches for mothers and infants. *Infant Mental Health Journal, 27*, 327–343.

POSNER, M. I., & ROTHBART, M. K. (2006). *Educating the human brain*. Washington, DC: American Psychological Association.

SPINRAD, T. L., EISENBERG, N., GAERTNER, D., POPP, T., SMITH, C. L., KUPFER, A., ET AL. (2007). Relations of maternal socialization and toddlers' effortful control to child's adjustment and social competence. *Developmental Psychology, 43*, 1170–1186.

SULLIVAN, M. W., & LEWIS, M. (1989). Emotion and cognition in infancy: Facial expressions during contingency learning. *International Journal of Behavioral Development, 12*, 221–237.

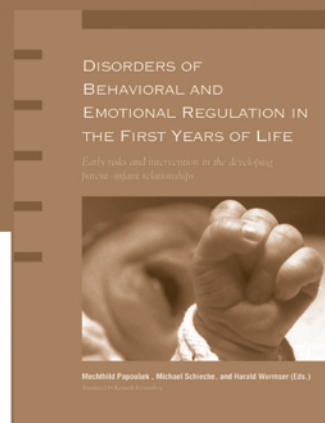
TERMINE, N. T., & IZARD, C. E. (1988). Infants' responses to their mothers' expressions of

joy and sadness. *Developmental Psychology, 24*, 223–229.

THOMPSON, R. A. (2009). Doing what doesn't come naturally: The development of self-regulation. *Zero to Three, 30*(2), 33–39.

THOMPSON, R. A., & MEYER, S. (2007). The socialization of emotion regulation in the family. In J. Gross (Ed.), *Handbook of emotion regulation* (pp. 249–368). New York: Guilford.

THOMPSON, R. A., & RAIKES, H. A. (2003). Toward the next quarter-century: Conceptual and methodological challenges for attachment theory. *Development and Psychopathology, 15*, 691–718.



FUSSY BABY OR BEHAVIORAL DISORDER?

Disorders of Emotional and Behavioral Regulation in the First Years of Life

Early Risks and Intervention in the Developing Parent–Infant Relationship

MECHTHILD PAPOUŠEK, MICHAEL SCHIECHE, and HARALD WURMSER
Translated by KENNETH KRONENBERG

Excessive crying, sleeping disorders, and feeding problems are some of the most common behavioral disorders in infants and toddlers. Yet, treating them confounds many parents—and clinicians. This book, now translated into English for the first time, shows how you can do a better job of supporting families through difficult times when their infant or toddler has a behavioral disorder or is at risk for one. Learn from numerous case studies and scientifically sound information on these disorders and others. ■ 2008. 346 pages. Paperback.

ITEM #370
ISBN 978-1934019-17-7
\$49.95



Order your copy today! Call toll-free (800) 899-4301 or visit our bookstore at www.zerotothree.org/bookstore