



Infant/Toddler Caregiving **A Guide to Social-Emotional Growth and Socialization**

**Third
Edition**



Edited by Peter L. Mangione and Jennifer Marcella-Burdett
Developed by WestEd for the California Department of Social Services





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Notice

The guidance in *Infant/Toddler Caregiving: A Guide to Social–Emotional Growth and Socialization*, Third Edition, is not binding on local educational agencies or other entities. Except for the statutes, regulations, and court decisions that are referenced herein, this handbook is exemplary, and compliance with it is not mandatory. (See Education Code Section 33308.5.)

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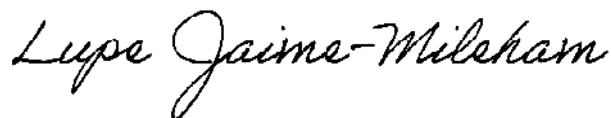
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A Message from the California Department of Social Services

The California Department of Social Services is pleased to present the third edition of the Program for Infant/Toddler Care (PITC) guide *Infant/Toddler Caregiving: A Guide to Social-Emotional Growth and Socialization*. Social-emotional development is fundamental to all areas of young children's development. Moreover, relationship experiences during infancy and toddlerhood have a major impact on their overall development and later success. Building responsive, caring relationships with infants and toddlers and nurturing their social-emotional development should be foremost in our minds as we provide care and partner with their families.

This third edition builds on the concepts presented in the previous edition of the guide related to early brain development, responsive relationships, and socialization, guidance, and discipline, and it expands on the understanding of temperament based on current research. This third edition also explains the central importance of racial and cultural context in early social-emotional development and describes the development of empathy in infants and toddlers. The concepts presented in this guide are drawn from current research, and the corresponding caregiving practices ensure a supportive high-quality care environment for infants and toddlers.

This guide illuminates how significant the work of caring for infants and toddlers is. Our daily interactions with infants and toddlers have a lasting impact on their development and well-being. We hope the information in this guide helps deepen your understanding of child care and development and add to the many ways you already support young children and their families.



Lupe Jaime-Mileham, EdD
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Elita Amini Virmani, PhD, is an associate professor at Sonoma State University in the Department of Early Childhood Studies. Prior to joining Sonoma State, she was the director of training for the PITC at WestEd's Center for Child & Family Studies, where she developed trainings and materials geared toward improving teacher, trainer, home visitor, and parent capacity for sensitive, responsive, and reflective practice. In 2016, she was recognized as an Exceptional Emerging Leader by the Exchange Leadership Initiative.

Dr. Amini Virmani aims to support the socioemotional health and well-being of young children through relationship-based intervention. In particular, she is focused on ways that reflective practice and supervision promote parent and teacher capacity to see from the child's point of view. She believes that as we learn to see from the child's perspective, we gain important insights into ways to be more sensitive and attuned to supporting their healthy socioemotional growth and development. Dr. Amini Virmani sees it as our social responsibility to ensure that all young children are seen and honored for who they are, central to which is their cultural and linguistic identity.

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Emily Newton, PhD, was recently a senior research associate at WestEd before transitioning to a position as a writer and early childhood content expert at Lovevery. She continues to contribute to WestEd's work in early childhood education and development. At WestEd, she has worked on projects related to infant/toddler care, early childhood education, program quality assessment, and formative assessment tools, including the Desired Results Developmental Profile. She was a principal writer and editor on the *Infant/Toddler Learning and Development Program Guidelines*, Second Edition. As a consultant with WestEd, she provided child development expertise on multiple projects. Dr. Newton has also worked as a professor at several universities and was the infant lead teacher at the Early Childhood Laboratory school at the University of California, Davis, and a trainer for the UC Davis Extension Center for Excellence in Child Development. Her articles have been published in *Child Development*, *Developmental Psychology*, *Infancy*, *Early Education and Development*, and the *ZERO TO THREE Journal*.

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Introduction

This guide for infant and toddler care providers and teachers offers a wealth of information to help them with their day-to-day efforts to nurture the social and emotional growth of infants and toddlers. The guide is one of a series developed by the Program for Infant/Toddler Care (PITC), a comprehensive training system that promotes a research- and practice-based approach to providing high-quality infant and toddler care in family child care and center programs. The PITC is a collaboration of the California Department of Social Services, the California Department of Education, and WestEd and is currently operated by the California Department of Social Services and WestEd. The PITC addresses all the major caregiving domains, including providing a safe and healthy learning environment, establishing culturally responsive relationships and partnerships with families, facilitating cognitive and language development, understanding care routines as part of the infant's curriculum, and implementing group-care policies such as primary care, continuity of care, culturally responsive care, and inclusive care. This guide to social-emotional growth and socialization provides information that pertains to the PITC's Module I.

Since the first edition of this guide appeared in 1990, the early care and education field has learned much from research and practice about early social-emotional

development. The second edition, which was published in 2011, included a chapter on early brain development. That chapter addressed what has been learned from early brain development research, with a focus on relationships, self-regulation, temperament, and coping with stress. This third edition widens the guide's approach to include a comprehensive understanding of social-emotional growth and socialization. In the first two editions, a culturally responsive and an anti-bias approach to nurturing infants and toddlers was addressed implicitly. In this third edition, the racial and cultural context in which infants and toddlers develop and its impact on social-emotional growth and socialization are placed at the center of understanding how to support young children socially and emotionally. In addition, recent research on infant temperament is examined in depth, and a new chapter focuses on the development of empathy in infants and toddlers.

Like the first two editions of this guide and the others in the series, this third edition is based on research that relates directly to infant and toddler caregiving practice. Some of the chapters summarize research and then spell out practices that stem from that research. Other chapters offer strategies for caregivers that stem from a general understanding of child development theory and research. In all chapters, the significant role of responsive relationships is central.

In the chapter titled “Resisting the Margins: Advancing an Imperative to Attend to Race and Culture in the Social–Emotional Growth and Learning of Infants and Toddlers,”

Drs. Eva Marie Shivers and Flóra Faragó examine how culturally responsive and anti-bias approaches to care support the development of infant and toddlers, with a particular focus on their social and emotional development. Both of these approaches have far-reaching impacts on the social and emotional development of infants and toddlers and the work of infant and toddler caregivers and teachers. Drs. Shivers and Faragó provide the rationale for why both culturally responsive and anti-bias approaches are necessary to optimize social and emotional outcomes for very young children. They offer a set of caregiving strategies that reflect culturally responsive and anti-bias approaches in the care of infants and toddlers. This chapter establishes the starting point for understanding and applying the concepts presented in the other chapters of this guide.

The chapter titled **“Creating Nurturing Relationships with Infants and Toddlers”** by Dr. J. Ronald Lally appeared in the first two editions. It describes a basic caregiving approach called the responsive process. The caregiver’s or teacher’s role is defined as a combination of learner, provider, and adapter. The responsive process helps develop the kind of nurturing relationships that lead young children to feel secure in themselves, value others, and learn socially appropriate behavior. In this chapter, Dr. Lally highlights the need for caregivers to redefine their roles in the development of the child’s self and social behavior as children grow from young infants to mobile infants to older toddlers.

In the chapter titled **“The Developing Brain and Its Importance to Relationships, Temperament, Self-regulation, and Coping with Stress,”** Dr. Ross A. Thompson, Janet E. Thompson, and Julia Luckenbill discuss the contributions of recent brain development studies to our understanding of infants’ and toddlers’ early social relationships, temperament, self-regulation, and ways of coping with stress. The authors summarize research findings that show how children’s early social understanding develops through experiences in relationships. They also explore how caring, nurturing adults can support infants’ emerging social understanding and the development of emotionally secure attachments that help them manage difficult situations. Through examples from their own work, the authors illustrate how infant caregivers and teachers can support children’s individual temperaments and guide the development of self-regulation in infants and toddlers.

The chapter titled **“Viewing Temperament as a Window for Understanding How Young Children Relate to the World Around Them”** by Drs. Elita Amini Virmani, Emily Newton, and Peter L. Mangione provides an updated understanding of temperament and its practical application. This understanding is informed by the foundation set by the work of Drs. Alexander Thomas and Stella Chess on infant temperament, which Stella Chess described in the first two editions of this guide. Drs. Amini Virmani, Newton, and Mangione first describe an updated concept of temperament, dispel some myths about it, and consider how our cultural backgrounds influence our perception of different temperament tendencies. They go on to describe five temperament tendencies

identified by the PITC and offer strategies for supporting children who differ in how their responses to various situations reflect each of the tendencies. This chapter closes by connecting the PITC Six Essential Policies (primary care, small groups, continuity of care, individualized care, culturally responsive care, and inclusive care) to the support of children who have different temperament tendencies.

In the chapter titled **“From Early Empathy to Acts of Kindness,”** Drs. Jennifer Marcella-Burdett and Cathy Tsao examine the relationship between early empathy and young children’s overall social competence. They discuss how empathy may influence children’s behavior in social interactions and the quality of social relationships they form. The development of empathy in infants and toddlers contributes to healthy, close relationships with family members, peers, caregivers, and teachers. Having sensitivity to feel another’s emotions and consider their perspectives can provide a foundation for acting kindly and compassionately when interacting with others. Drs. Marcella-Burdett and Tsao describe a range of research-based strategies for supporting the development of empathy, with particular attention to ones to use with the different age groups of young, mobile, and older infants.

The chapter titled **“A Developmental Approach to the Socialization, Guidance, and Discipline of Infants and Toddlers”** is based on a chapter by Dr. J. Ronald Lally in the second edition of this guide. In this chapter, Drs. Lally and Mangione describe an approach to the socialization of infants and toddlers that considers a child’s changing developmental capacities. It

explains why similar behaviors in children of different ages need to be treated differently and why factors as diverse as adult-to-child ratios, environmental arrangements, and number of transitions in a day can influence the behavior of the children in group care. Drs. Lally and Mangione explore some of the ways an adult’s “image” of a child—beliefs about how children think and what motivates them—can influence how that adult socializes young children. They then discuss appropriate socialization goals for both individual children and groups and ways to prevent, or at least decrease, behavior that a particular teacher may consider challenging or unacceptable or that may require intervention. The chapter closes with recommendations on how to plan and conduct individualized interventions with children.

In the chapter titled **“Self-esteem, Security, and Social Competence: Ten Caregiving Gifts,”** which is in all three editions of this guide, Dr. Jeree Pawl describes as gifts ten powerful ways of interacting with infants and toddlers. The ten gifts illustrate the types of caregiver behaviors that directly influence infant self-esteem and model for the child how best to relate socially to other human beings. They range from ways that encourage very young infants to feel they can make things happen to helping babies learn about intimacy to reminding children in group care of the absent parents’ continued existence. Taken together, Dr. Pawl states that the 10 gifts create a relationship with infants and toddlers in which the children are helped to feel effective, trusting, mutually engaged with the caregiver, personally known and understood, and that they are the proper owner of their own wishes and feelings.

The **appendix** is a reprint of the social-emotional foundations that appear in the *California Infant/Toddler Learning & Development Foundations* (California Department of Education 2009). Based on research, the foundations describe competencies infants and toddlers typically attain from birth to age three when they are provided appropriate developmental support. For each foundation, a description of competencies is specified at three points of development: at around eight months of age, at around eighteen months of age, and at around thirty-six months of age. In addition, knowledge, skills, and behaviors are listed that lead to those described for each of the three age levels.

In sum, this PITC guide invites care providers and teachers to develop a relationship with individual children and their families as a first step in supporting the children's social-emotional growth and socialization. With a relationship as the foundation, care providers and teachers can learn about each child from the family and through interacting attentively with the child. To support the social-emotional growth and socialization of each child, an understanding of their family, culture, and lived experience is essential. Interacting with each child respectfully, observing them, considering their developmental stage, and appreciating their way of responding to various situations are also essential. A young child prospers when a care provider or teacher is responsive to whom that child is becoming and is their ally and guide as they learn to regulate themselves, develop feelings of belonging, and relate to others with empathy, wonder, and connection.

Resisting the Margins: Advancing an Imperative to Attend to Race and Culture in the Social-Emotional Growth and Learning of Infants and Toddlers

Eva Marie Shivers and Flóra Faragó

The first two editions of this PITC caregiving guide addressed aspects of culturally responsive care implicitly. The content of those two editions was designed to be used hand in hand with the PITC caregiving guide on culturally sensitive care, which is grounded in an anti-bias approach to early development and care. Over time, research has deepened our understanding of the integral role of race and culture in early social-emotional growth and learning. This chapter examines what we have learned from the research. It offers infant and toddler caregivers an in-depth understanding of how culturally responsive and anti-bias approaches support young children's development, with a particular focus on their social-emotional development.

In the 1990s, the topics of culturally responsive education and anti-bias education made their way into our education discourse (Iruka et al. 2020). Over the past 30 years, many adaptations to and a deepening of these two frameworks have continued to evolve. This chapter's overarching framework is to explore the impacts of these approaches as they relate to the social-emotional development of infants and toddlers and to the

work of infant and toddler caregivers and teachers. We adopt the stance from Iruka and colleagues (Iruka et al. 2020) that both culturally responsive and anti-bias approaches are necessary to optimize social-emotional outcomes for very young children.

This Chapter's Approach—Contexts Matter!

This chapter's approach to exploring culturally responsive care is influenced by a predominance of the literature that has positioned culturally responsive care as a relational construct. That is, teachers



who are responsively attuned to each child's culture will have a positive impact on children's social-emotional development and, thereby, on their later growth and development. However, this chapter will also make the case that both culturally responsive and anti-bias early education and the resulting impacts on teacher-child relationships and on infants' and toddlers' social-emotional outcomes are influenced by broader societal dynamics such as socioeconomic privilege, racism, marginalization, and oppression. It is only recently in developmental psychology, early education research, and professional development narratives that our field has embraced and highlighted the broader societal influence on children's concurrent and future development.

Therefore, this chapter will explore multiple contexts that impact young children's social-emotional growth and learning, such as systems, histories, families, and, of course, early education settings. This chapter begins with the call for transformative social-emotional learning, which expands traditional notions of social-emotional development to include areas such as culture, identity, belonging, and responsible individual and collective actions. The chapter goes on to describe the impact of social and structural determinants, such as poverty and racism, on the well-being of children, families, and early childhood educators. We describe in depth the earliest roots of developing racial and ethnic identity and how caregivers may support that development. Additionally, to serve as a source of knowledge and inspiration for early childhood educators, we offer racial socialization strategies that parents of color use to teach children about race and ethnicity. Because young children learn and develop

in the context of relationships, we offer an overview of attachment theory, the importance of considering attachment relationships within the broader contexts they develop, and the relationship between attachment, culture, and trauma. The chapter concludes with several ways in which early childhood caregivers can consider race and culture in their settings, such as by creating strong partnerships with families, implementing culturally congruent routines in the child care setting, and using an anti-bias approach to curricula.

Transformative Social-Emotional Learning Framework

Numerous frameworks have been used to describe social-emotional development and learning, including the *California Infant/Toddler Learning & Development Foundations*. In general, the frameworks





focus on similar knowledge and skill areas, each organized in a different way. As an example, we refer to the social-emotional learning (SEL) framework of the Collaborative for Academic, Social, and Emotional Learning, or the CASEL framework, because it is widely known and used. In the CASEL framework, social-emotional development and learning are integrated into five core competences, including (1) self-awareness (e.g., understanding oneself), (2) self-management (e.g., managing stress, controlling impulses), (3) social awareness (e.g., taking perspectives and empathizing with others), (4) relationship skills (e.g., building healthy relationships), and (5) responsible decision-making (CASEL 2020). Although promoting these competencies has produced positive outcomes, this individual competence-oriented approach to SEL and growth has been

criticized recently for promoting limited, dominant mainstream approaches to the development of young children. Social justice education advocates argue that the approach ignores the primary social contexts that have negatively impacted the health and wellness of racially minoritized communities (Camangian and Cariaga 2021; Sun et al. 2022).

As a response to such criticism, a framework called transformative SEL has been proposed in order to include and acknowledge the broader historical and societal root causes of racial and economic inequities (Jagers, Rivas-Drake, and Williams 2019). Transformative SEL is grounded by social justice and critical educational theories, and it expands the CASEL framework to focus on domains such as culture, identity, agency, belonging, and engagement, fostering critical self- and social awareness and responsible individual and collective actions in children and adults (Sun et al. 2022). The use of a transformative SEL framework in the context of early care and education has the potential to challenge existing power systems in order to address inequalities and other racialized, societal dynamics that play out in settings with very young children. Wherever possible, this chapter highlights the connections among culture, race, social-emotional growth, and learning in the context of infant and toddler early care and education.

Terminology Used Throughout This Chapter

- Throughout this chapter we use the terms *Black* and *African American* interchangeably. We also use *Latine* as a gender neutral racial identity label.
- We use the terms *children of color* and *racially minoritized children*.
- We do not capitalize *white* but capitalize *Black*, *Indigenous*, and *People of Color* to challenge the power of whiteness, decenter it, and elevate BIPOC perspectives.
- We use *gender* rather than *sex* as an inclusive term that acknowledges that gender is socially and contextually constructed and is a multidimensional facet of identity.

Social and Structural Determinants of Well-Being and Young Children's Social-Emotional Growth

Social and structural factors like poverty and racism are detrimental to the development of infants and toddlers (Derman-Sparks and Edwards 2010). Indeed, in 1967 Martin Luther King Jr. underscored that the problems of racism and economic exploitation were woven together and had devastating impacts on communities, families, and individuals (King 1967). At the most basic level, poverty and racism make it difficult for families to access resources and supports that are important to young children's development, like quality health care, housing, transportation, and access to high-quality child care. Poverty and racism also impact parent and caregiver stress via a myriad of pathways, which impacts the development of young children as well (McLoyd 1990).

Understanding the root causes of challenges faced by many families because of historic and current systemic barriers is important for the teachers of infants and toddlers. There are several ways that infants' and toddlers' experiences in a high-quality child care setting can help mitigate some systemic challenges. In terms of infants' and toddlers' social-emotional development, a key pathway for ameliorating some of the negative consequences of poverty and racism might include co-constructing positive relationships with young children and their families (Iruka et al. 2020).

Connecting the Dots: Cognitive Development, Culture, Race, and Social-Emotional Development

The Development of Ethnic-Racial Identity

Ethnic-racial identity refers to a child's ability to identify their racial and cultural group membership and to a child's feelings about or views of themselves based on belonging to a group and having a connection to others who share the same racial, cultural, or linguistic heritage. Most research to date that has examined ethnic-racial identity formation has focused on older youths (e.g., DeCuir-Gunby 2009; Del Toro and Wang 2021). Much less attention has been paid to ethnic-racial and cultural identity development in young children (for an exception, see Iruka et al. 2021).

As early as infancy, children can detect differences in facial features, specifically differences in racial phenotypes (Njoroge et al. 2009). Although detecting physical differences among racial groups is not akin to developing racial identity or racial prejudice, infants' abilities to cue in on physical differences among racial groups sets the foundation for these later developmental milestones. By age two, children use racial categories to reason about others (Hirschfeld 2008). Starting around two to three years of age, children start to make inferences about themselves and others based on race, including in early childhood settings (see Farago, Davidson, and Byrd 2019; Farago, Sanders, and Gaias 2015). Although personality does not solidify until later years, starting around toddlerhood young children can tell stories about themselves

and about various aspects of their identities (McAdams and Olson 2010), such as gender and where they are from. Given children's observations about race in combination with their narrative storytelling skills, it is reasonable to assume that the beginning foundations for ethnic-racial identity development are laid in early childhood. Further, there is growing evidence that ethnic-racial identity plays a role in young children's social-emotional, cognitive, school readiness, and academic development (Iruka et al. 2021).

Developing a positive ethnic-racial identity in young children is a critical aspect of children's social-emotional development (Iruka et al. 2021). Self-awareness and social awareness are equally important (Iruka et al. 2021). Self-awareness refers to children's understanding of their own personality, behavior, and roles in social networks. Social awareness refers to children's ability to engage in empathy and perspective taking, including their understanding of diversity. Children begin to develop self- and social awareness in infancy, and these skills become ever more sophisticated throughout toddlerhood and early childhood.

Eventually, children develop racial-ethnic identification, or the ability to identify themselves as part of a racial or ethnic group (Iruka et al. 2021). Children also begin to develop racial-ethnic preference in the early years, or a positive feeling toward their own racial or ethnic group (Iruka et al. 2021). Young children can develop ethnic or racial pride, which can be especially important for young children of color and can support positive development across various domains of development (e.g., social, cognitive, academic).



Supporting Racial and Cultural Identity Development in Young Children

Families, caregivers, educators, and other professionals working with young children, especially with young children of color, can lay a strong foundation for positive racial-ethnic identity development in infancy and toddlerhood and can support its continued development in numerous ways (Blanchard et al. 2019; Curenton, Crowley, and Mouzon 2018; Edwards and Few-Demo 2016; Faragó, forthcoming; Howard, Rose, and Barbarin 2013; Suizzo, Robinson, and Pahlke 2008). For instance, caregivers can

- use books, toys, art supplies, videos, and other materials that accurately represent children's racial and cultural groups and home languages;
- encourage children to listen to music and engage in dancing and movement relevant to children's racial or cultural groups;
- affirm the beauty of children's hair and skin color;
- integrate cultural foods and storytelling that feature children's racial and cultural groups into children's environments;

- incorporate children's home cultures and languages into children's environments;
- engage children in age-appropriate and explicit conversations about race, racial differences, and racial inequities (in the case of older toddlers, caregivers' comments and questions are usually in response to toddlers' questions, the ideas they express, or their interactions and behaviors);
- reflect on their own racial identity, racialized experiences, and attitudes about race and how these impact their views and interactions with children and families;
- ask a colleague to observe them in the classroom to identify any potential ways their nonverbal behavior may manifest racial bias (e.g., less frequent interaction with BIPOC children); and
- refer to additional recommendations outlined at the end of this chapter.

Additionally, caregivers can encourage young children to learn about both their own and others' racial and cultural identities by teaching about diversity and multiculturalism, justice, race and racism, and similarities and differences among races (Derman-Sparks and Edwards 2010, 2016; Faragó, forthcoming). Caregivers can emphasize the importance of representing racial and cultural diversity in children's environment via pictures, art, toys, and experience with people of different cultural and racial backgrounds. Educators can invite families to the classroom so they can share about their own cultural and racial backgrounds (Derman-Sparks and Edwards 2010, 2016; Faragó, forthcoming).



Supporting the development of positive ethnic-racial identity in children of color has been linked to improved mental health and psychosocial functioning in adolescents (Rivas-Drake et al. 2014). Although research is much more limited with younger children, there is indication that nurturing a positive racial identity in young children of color via racial socialization is beneficial for children's cognitive and social development, pre-academic and academic skills, cognitive skills, and overall behavior (Barbarin and Jean-Baptiste 2013; Brown, Tanner-Smith, and Lesane-Brown 2009; Caughy, Nettles, and Lima 2011; Caughy et al. 2006; Caughy et al. 2002; Caughy and Owen 2015). What a positive racial identity means for white children is less clear. Potentially, for white children, a positive racial identity may mean the reduction of racial prejudice, naming and interrupting white privilege, recognizing and confronting racial prejudice and bias in themselves and in others, developing allyship, and developing anti-racist attitudes (Farago, Davidson, and Byrd 2019; Hazelbaker et al. 2022; Loyd and Gaither 2018).

Culture, Developing Brain, and Connections to Social-Emotional Growth and Learning

In Zaretta Hammond's seminal book, *Culturally Responsive Teaching and the Brain* (2015), she argues that culturally responsive care and education is a powerful tool teachers can use to help minimize the "achievement gap" (Hammond 2015). She makes explicit connections among the brain (and the larger nervous system), culture, and teaching and caregiving,

and she notes that "a systematic approach to culturally responsive teaching is the perfect catalyst to stimulate the brain's neuroplasticity" (15). Hammond highlights six core principles to help us understand how the brain uses culture for development and survival (i.e., "to interpret threats and opportunities") (46). All of these principles are essential for understanding the role culture plays in the development of relationships and a young child's unfolding development.

Hammond's Six Core Design Principles of the Brain and Culture

1. The brain seeks to minimize social threats and maximize opportunities to connect with others in community.
2. Positive relationships keep our safety-threat detection in check.
3. Culture guides how we process information (including social information).
4. Attention guides learning (including social learning).
5. All new information (including different ways of doing things, like following daily routines) must be coupled with existing funds of knowledge in order to be learned.
6. The brain physically grows through challenge and stretch, expanding its ability to do more complex thinking and learning.

All young learners experience some level of stress in their early care environments as they struggle with learning certain tasks and achieving certain developmental milestones. This stress and anxiety may be exacerbated when they feel misunderstood, marginalized, or unsupported because of their culture, race, gender, or language. In order for infant and toddler caregivers to create the conditions for optimal growth, learning, and development, we must understand how the brain responds to threats, both real and perceived. Our goal is to help children of color and linguistically diverse children reach a state of relaxed alertness. Relaxed alertness facilitates the cocreation of harmonious relationships,

self-regulation, and other aspects of behavior that are closely linked to other learning domains. Neuroscience tells us that we are hardwired to connect with one another. By increasing our awareness and understanding of the brain and culture, and by attending to our own emotional regulation, we can design and maintain early care environments that facilitate these optimal connections in the daily lives of infants and toddlers. Creating an environment in which infants and toddlers can see, hear, and feel like they belong contributes to their ability to reach a state of relaxed alertness. For example, learning directly from families how they engage their infants in daily routines provides a useful starting

point for early childhood educators to provide culturally congruent routines within the child care setting.

Developmental Processes for Cultural and Racial Socialization with Very Young Children

Ethnic–Racial and Cultural Socialization

One strategy for nurturing positive ethnic–racial identity in children is ethnic–racial socialization. Ethnic–racial socialization refers to practices that communicate information about race to children (Hughes et al. 2017). Ethnic–racial socialization includes cultural socialization, or teaching children about their racial heritage and instilling racial pride; preparation for bias, or teaching children about racism and discrimination; promotion of mistrust, or warning children about distance from other racial groups; and egalitarianism, or emphasizing similarities and equality among races (e.g., Hughes 2003).

Parents of young children of color engage in various aspects of racial socialization, such as cultural socialization (e.g.,

Blanchard et al. 2019; Edwards and Few-Demo 2016), preparation for bias (e.g., Blanchard et al. 2019; Doucet, Banerjee, and Parade 2018), promotion of mistrust (Caughy et al. 2002), and egalitarianism (e.g., Blanchard et al. 2019; Edwards and Few-Demo 2016). Research with Black families has shown that parents are most likely to discuss the positive aspects of racial socialization with young children rather than the negative aspects, such as discrimination or racism (Edwards and Few-Demo 2016; Suizzo, Robinson, and Pahlke 2008). To promote cultural socialization, some parents proactively address race, foster racial pride, and teach about cultural traditions, history, and ancestors. Others focus on exposing children to role models from their own racial or cultural groups, such as peers and community members. Some seek to expose their children to representation of their own racial and cultural group in books, in toys, and on television. And some discuss children’s physical beauty and praise their children for unique characteristics associated with being a member of a particular racial group.

Some parents express concern about their children facing racism and discrimination. In one study, Black mothers of toddlers felt the need to protect their children from racism and disclosed that their children were victims of racist incidents by peers (Curenton, Crowley, and Mouzon 2018). Some parents promote egalitarian messages about children of color seeing themselves as equal to others and emphasize equality among all races (Blanchard et al. 2019; Doucet 2008; Doucet, Banerjee, and Parade 2018). Some parents expose children to diverse environments so their children can learn to navigate diverse contexts in society (Blanchard et al. 2019;



Howard, Rose, and Barbarin 2013; Doucet 2008; Suizzo, Robinson, and Pahlke 2008). Some parents have explicit conversations about racial inequality, discrimination, and racism with their children. Overall, there are numerous ethnic–racial socialization strategies that parents of color engage in, and this chapter identifies some of them.

Ethnic–racial socialization strategies that parents of color use to teach their children about race and ethnicity can serve as sources of knowledge and inspiration to educators and caregivers. Iruka and colleagues (2021) review seven different early childhood programs and resources that can aid families and professionals in engaging in ethnic–racial socialization and supporting the development of positive racial identities in young children (see table 1 on page 9 in Iruka et al. 2021). As mentioned earlier, ethnic–racial socialization has been shown to be beneficial for young children’s cognitive and social development, pre-academic and academic skills, cognitive skills, and overall behavior. Therefore, caregivers are urged to engage in racial socialization with children as young as infancy. A survey study of over 340 early childhood educators found that, starting in infancy, both verbalizing information related to racial identity and using toys, books, and other materials that represent racial diversity are important (Farago and Swadener 2016). In this study, some educators promote racial socialization and racial identity development in young children via

- books that represent families of color;
- art activities, such as encouraging children to draw self-portraits with skin tones that match their own;



- conversations that encourage children to identify and label their own skin color;
- activities that encourage children to notice similarities and differences among skin colors; and
- “buddy-up” activities that encourage interaction among racially diverse peers.

Noticing Difference

As early as infancy, young children are able to detect racial differences among people based on visual cues (Njoroge et al. 2009). Infants notice and look longer at people whose skin color differs from that of their primary caregivers. Thus, skin tone differences among people are a salient physical trait that even infants detect. Societal messages and structures then teach children to associate meaning, stereotypes, and prejudices with the physical trait of particular racial groups. In other words, it is not the differences or noticing differences that leads to prejudice and discrimination but rather the meaning associated with these differences (Derman-Sparks and Edwards 2010).

Once children begin to talk, they may point out and ask about differences,

including racial differences, among people. Therefore, it is critical that caregivers prepare for these teachable moments so they can actively respond to, rather than silence, the child (Farago, Sanders, and Gaias 2015). If adults do not explicitly address race and racism with young children, children may draw stereotyped conclusions privately (Boutte 2008; Derman-Sparks and Edwards 2010; Derman-Sparks and Ramsey 2006). For example, children may assume that people of various races have different blood types (Hirschfeld 1996). Although for some caregivers it may be tempting to stay silent about race and racism, silence may teach children that race is a taboo topic and does not allow children to eventually recognize and challenge racism (Boutte, Lopez-Robertson, and Powers-Costello 2011). Silence can also signal compliance or agreement with current systems of race and racism. Therefore, it is critical for caregivers to find out what children know about race and to directly challenge children's misconceptions and stereotypes (Derman-Sparks and Edwards 2010; Grieshaber 2008). As



Derman-Sparks and the ABC Task Force (1989) reinforce, “children are as vulnerable to omissions as they are to inaccuracies and stereotypes” (5).

Developing Bias, Prejudice, and Preference

Young children develop bias, prejudice, and racial preference in their early years (Vandenbroeck et al. 2010). Although associating positive traits with one's racial group can have beneficial effects, associating negative traits with others' racial groups can lead to exclusion, bullying, and other negative outcomes. Early childhood professionals have a great opportunity to intervene and interrupt children's prejudices and biases (Farago, Sanders, and Gaias 2015). Research suggests that adults have to be explicit with children about racial bias and prejudice and that positive talk focusing on treating others kindly and fairly is not enough. Explicitly addressing race and racism with young children is taking an actively anti-racist stance; addressing race or racism indirectly with general strategies of “being nice and kind” is a passive nonracist stance. General and passive nonracist or anti-bullying interventions are not likely to be effective in reducing racial bias unless learning about racial bias is an explicit aspect of the curriculum (i.e., anti-racist). Intervention programs that use teacher-led discussions and storybook activities can be successful in reducing prejudice in young children, as these tasks can encourage perspective taking and empathy (Farago, Sanders, and Gaias 2015). For example, in reading an age-appropriate book in which a character is being treated unfairly, a toddler teacher may help draw toddlers' attention to how the character feels.

Although most research has focused on children in elementary school and on adolescents, reducing bias and prejudice in young children is theorized to have

positive impacts on young children's peer relationships, racial attitudes, and feelings toward others from different racial groups (Aboud et al. 2012). Additionally, exposure to diverse peers and materials in preschool, and possibly before, has been linked to children having more cross-race friends and lower levels of bias in elementary school (Gaias et al. 2018). Educators and caregivers can promote cross-racial friendships and positive racial attitudes in young children by increasing children's exposure to racially diverse people and materials in early childhood contexts (Gaias et al. 2018).

Explicit Racial and Cultural Socialization

Explicit racial and cultural socialization can entail conversations between adults and children about racial identity, racial heritage, discrimination, racial pride, and other topics around race and culture. Caregivers may use books and other resources to aid with explicit racial socialization. They may also use racial labels such as Black, white, and Latine explicitly to refer to their own and others' racial groups. Although using skin color descriptions such as "almond," "coffee," and "peach," may be more popular with early childhood educators than using racial group labels such as Black, Latine, and white, it is important that children learn about accurate race labels early on (Beneke and Cheatham 2019). Possibly, caregivers may explicitly teach racial stereotypes and tropes to children by verbalizing these messages around children via jokes, conversations, or other means.

Implicit Racial and Cultural Socialization (Including Bias)

Implicit racial and cultural socialization can entail the racial composition (i.e., the diversity or lack thereof) of a child's classroom, school, or neighborhood; the racial



composition of families' social networks; the nonverbal behavior of adults; and implicit stereotypical messages represented in TV, advertisements, and other media. Research suggests that even preschoolers are sensitive to adults' nonverbal racial cues (Castelli, De Dea, and Nesdale 2008). Researchers have argued that an adaptive protective factor received by many very young children in home-based child care settings (e.g., family, friend, or neighbor child care) may be the distinct ethnic-racial socialization experiences that most closely match the messages children receive within their families (Shivers 2006; Shivers and Farago 2016).

Implicit racial biases can have serious consequences, especially for young children of color. For instance, caregivers' racial biases are thought to be a cause behind the disproportionate expulsion and suspension of young children of color, relative to their white peers, as early as preschool (Gilliam et al. 2016; Rudd 2014; Meek and Gilliam 2016). Disciplinary decisions such as expulsions and suspensions are adult decisions, not child behaviors (Meek and Gilliam 2016), meaning that policy and program-level interventions could potentially seriously reduce incidence rates.



A recent study demonstrated that implicit racial bias may play a role in early childhood discipline disparities (Gilliam et al. 2016). Early childhood professionals who are predominantly white were told to expect challenging behaviors while watching a video of four preschoolers. Although the video did not contain any challenging behaviors, participants looked longer at Black children, especially at Black boys, than at white children, surveilling the children with their eyes. The authors concluded that implicit racial biases may lead teachers to scrutinize the behaviors of Black children more closely than those of white children (Gilliam et al. 2016). Research indicates that caregivers need to self-reflect and examine their own biases, and need professional support and resources, to eliminate racial disparities in discipline.

Developmental Considerations

Young children may distort or misremember adults' messages about race (see Farago, Davidson, and Byrd 2019; Farago, Sanders, and Gaias 2015). In other words, children are not passive recipients of information about race and culture.

Families and educators need to be sensitive to and vigilant of children's reactions to messages of ethnic-racial socialization. It is important to ask children questions and listen to their responses and reactions to conversations about race in order to ensure that the information presented stays developmentally appropriate (Farago, Davidson, and Byrd 2019; Farago, Sanders, and Gaias 2015).

Infants' and Toddlers' Multiple Contexts of Relationships: Home, Community, and Early Education

"Recognize that children's learning and development do not occur in a vacuum divorced from everyday society."

—Dr. Iheoma Iruka (2019)

Attachment Relationships and Culture

The research literature agrees on one essential element of high-quality settings for infants and toddlers in early care and education: the presence of sensitive, nurturing providers who can build positive and trusting relationships with children (Howes 1999; Shonkoff and Phillips 2000; Wishard et al. 2003). Young children do form attachment relationships with their early care providers that may be independent of parental attachment quality. Children with secure attachments to providers in early care and education tend to be socially competent with peers and longitudinally have positive relationships with teachers (Howes 1999; Howes 2016; Pianta, Hamre, and Stuhlman 2003). Also, the antecedents of attachment quality are similar for early care providers and parents. That is, caregivers who are rated as more sensitive in their interactions

with children are associated with children's secure attachment scores (using the Attachment Q-Sort, Waters 1990) (Howes 1999; Shivers and Farago 2016).

Traditionally, attachment theory has relied on an acultural and dyadic orientation regarding children's relationships with others. Alternative and more recent conceptualizations situate attachment relationships within a broader context, in which cultural meanings regarding attachment and with whom an attachment relationship can develop are addressed (Weisner 2016). Research suggests that attachment relationships develop across cultures, but cultural values and practices determine who children develop attachment relationships with and what sensitive and responsive care looks like in a particular cultural context. Given cultural variation in attachment relationships (e.g., how a child orients toward a safe base or bases), caregivers need to learn from each child's family how they relate to their infant or toddler and how their child interacts with them. Information from the family about the child's relationship experiences at home will help the caregiver provide cultural congruence in the infant and toddler care program.

One of the legacies of Dr. Carollee Howes' child care research is to have evolved the theory of attachment to include (1) child care providers as potential attachment figures and (2) the use of a sociocultural lens in considering relationships in child care (Howes 1999; Howes 2010; Howes 2016). Howes' framework integrates theories of attachment relationship formation with Rogoff's construct of

cultural community (Rogoff 2003). This framework explains how children's experiences forming relationships with adults and other children are shaped by cultural practices. It incorporates the multiple contexts of individuals, dyads, classrooms, and cultural communities. In order for us to understand how culture impacts the formation of attachment relationships in early care settings, we must consider both the dynamic interplay between children's unique social and emotional developmental processes within the child care setting and the manner in which infant and toddler caregivers construct and maintain the social-emotional climate of the classroom.

Attachment, Culture, and Trauma

Whereas attachment and culture are undeniably important to infant and toddler mental health (which includes social-emotional growth and learning), the inclusion of trauma into this framework may at first glance seem less warranted. However, the prevalence of trauma in the historical past (and present) of many minoritized groups and in the current lives of very young children justifies a brief exploration of how attachment, culture, and trauma are all connected and what this means in the context of infant and toddler caregiving environments.

Research on adverse childhood experiences (ACEs)¹ and the development of neurological advances (Perry and Winfrey 2021) has helped us understand more completely the interplay of epigenetics, environment, and an individual's growth and learning trajectory. This deeper understanding has led to increased

1. Adverse childhood experiences are traumatic events that occur before a child reaches the age of eighteen. ACEs include all types of abuse and neglect, such as parental substance use, incarceration, and domestic violence. ACEs can also include situations that may cause trauma for a child, such as having a parent with a mental illness or being part of a family going through a divorce. A landmark study in the 1990s, the CDC-Kaiser ACE Study (Felitti et al. 1998), found a significant relationship between the number of ACEs a person experienced and a variety of negative outcomes in adulthood, including poor physical and mental health, substance use, and risky behaviors. The more ACEs experienced, the greater the risk for these outcomes.



awareness of the impact of trauma on both concurrent and longitudinal development and thereby to an increased sense of urgency to implement more prevention programs for families with young children and to intervene as early as possible. Indeed, at the writing of this chapter, it is not unusual for typical professional development experiences for teachers and caregivers of very young children to include training on trauma and ACEs.

Early childhood researchers and practitioners have explored the connections among (1) culture and attachment, (2) attachment and trauma, and (3) culture and trauma. What is new is the fusion of these three powerful forces and the emerging early childhood trauma-informed agenda that is focusing our attention on how interactions among these forces might shape the beliefs and values, behavior, feelings, and thoughts of both caregivers and young children. Many in the field of early care and education are coming into greater awareness that our present-day interactions with the young

children in our care are shaped by attachment, culture, and trauma and by our combined histories.

The experience of trauma can produce disruptions in culture and attachment that can lead to social, relational, and psychological pathology (Ippen 2009; Lewis and Ippen 2004). These disruptions happen in the multiple contexts of caregiver–child relationships as well as in a broader community and societal context. The legacy of historical trauma is most dramatically seen in cultural communities that are (and have historically been) plagued by poverty, racism, discrimination, and oppression. The impact of historical trauma persists because the societal ills related to injustice are still present in our current reality. Before we attempt to “fix” and change parental or caregiver practices with young children because they are not consistent with our understanding of developmentally appropriate practice, we must understand that these practices might have evolved as a part of an adaptive

process that serves (or served) as a protective function (Lewis and Ippen 2004).

It is important to note that solely focusing on the pathology in families is not effective. It is also vitally important to include and embrace understanding and acknowledgment of strengths in a family, community, and cultural group. We all desire to be seen and valued as being “good,” and we all need to know that we belong to or came from a group that is or was strong and good (Ippen 2009).

Understanding infants’ and toddlers’ social-emotional development in the context of the attachment, culture, trauma (ACT) framework (Ippen 2009) is an important way to help us (1) understand the role that interventions like high-quality child care can offer young children and families; (2) create a sense of urgency regarding the creation and implementation of new best practices and standards in the caregiving of infants and toddlers that are based on evolving knowledge of attachment, culture, and trauma; and (3) help us advance (and pay for) the implementation of supports in early care and education. Such supports, like infant and early childhood mental health consultation (IECMHC), help caregivers understand how their own histories of trauma, culture, and attachment might be contributing to their attitudes and beliefs about child rearing, the co-construction of relationships with young children in their care, and their everyday caregiving practices (Johnston and Brinamen 2012).

Our fields of early childhood development and infant and early childhood mental health are learning so much about the lifelong impact of trauma, especially trauma experienced during infancy and toddlerhood. Early childhood educators

who understand how trauma plays out in their own lives, as well as in the lives of the children in their care, can play an important role in supporting young children who may be experiencing trauma specifically as a result of their membership in minoritized communities that have been historically and are concurrently marginalized and oppressed. We can provide equitable early education that integrates culturally responsive and anti-bias practices by applying our lens of attachment, culture, and trauma. This expanded knowledge of how attachment, culture, and trauma impact the development of young children—especially within the child care setting—can help us address bias, racism, and low expectations that are often internalized by even very young children (Iruka et al. 2020).

Race and Culture in Early Care and Education: Impacts on Infant and Toddler Development

Child Care Provider Well-Being and the Impact on Young Children’s Social-Emotional Development

The early childhood workforce is disproportionately made up of women of color, who lack adequate wages and benefits. Similar to many of the children and families they serve, early childhood educators may also face multiple structural and social determinants of well-being, including poverty and racism (Sethi, Johnson-Staub, and Robbins 2020). Teachers who identify with a racially minoritized group, or groups, experience additional layers of stress related to racism, oppression (both external and internalized), and bias both

within their child care work environments and in their daily personal lives.

In addition, the research on job-related stressors suggests that teachers in early care and education hold jobs that may confer additional risk to their well-being (Curbow 1990; Raver 2004). Teachers' work stressors have been described along the dimensions of job demands, job resources, and job control (Curbow et al. 2001). Experiencing high demands (e.g., keeping a large number of infants and toddlers safe, organized, and attentive), low psychological resources (e.g., lack of appreciation from families), and a lack of self-efficacy (i.e., little confidence in their ability to manage children's behavior) has been linked to teachers feeling burnt out and exhausted (Hakanen, Bakker, and Schaufeli 2006).

Teachers and caregivers of infants and toddlers may have difficulty maintaining emotionally positive classroom climates and successful behavior management

when they themselves experience a high level of psychosocial stress in their personal lives and in their roles as caregivers (Grining et al. 2010). Moreover, these psychosocial stressors may limit teachers' ability or willingness to participate in interventions designed to support them in sustaining positive emotional climates and effective behavior management in their classrooms. It is important to note that teachers' developmental contexts are broad, spanning both the personal and professional spheres of their lives. Teachers' own developmental contexts often also include experiences related to attachment, culture, and trauma. These contexts and experiences can impact caregiving domains such as values and beliefs, child care practices, co-construction of relationships with young children and their families, and how teachers relate to their colleagues and supervisors. Many in our field will not be surprised to read that teachers of very young children experience high levels of personal and



work-related stress. Likewise, it is not surprising to understand the link between teachers' stressors and the emotion socialization processes occurring in their classrooms, such as teachers' showing positive emotions toward children and managing children's behavior (Kontos and Stremmel 1988). It is imperative that as we continue to evolve our understanding of what it means to promote optimal environments in early care and education for infants and toddlers, we include support for teachers' physical, emotional, and mental well-being in our quality improvement initiatives and approaches.

Family and Child Care Provider Partnerships

As Doucet (2008) outlines, teacher-parent partnerships have been framed in a positive light, assuming cultural congruence between the home and schools. If these partnerships are not formed, parents and families, especially families of color, are viewed from a deficit lens. For example, early educators may assume that parents of color are not interested or invested in their child's education and well-being. Therefore, it is important for early educators and caregivers to turn the lens on themselves and ask themselves, "What can I do to build stronger relationships with parents?" or "What in my practice is preventing parents from engaging?" It may be that early educators, rather than taking time to conduct home visits, are expecting parents to show up at the classroom. It may be that there are language barriers to address. It may be that the educator's hours of availability do not align with parents' work schedules. It may be that some parents of color feel judged or unwelcome. Listening to parents and their concerns becomes critical to building positive relationships between

educators and families (Doucet 2008). It is important that educators and child care providers partner with families in cocreating racial socialization practices and nurturing positive racial identity development in young children (Sanders and Molgaard 2019).

Parents of color and white teachers may have different perspectives on racial incidents and on the best way to handle such incidents (Bernhard et al. 1998). In Bernhard's study, white early educators felt that racial incidents were adequately handled, whereas parents of color often felt unheard and reported that their concerns of racism were trivialized and explained away. Therefore, it is important for early educators to listen and hear parents' concerns and, if educators are white or do not match families' racial backgrounds, approach any concerns brought up about race with racial humility and empathy.

Another important dimension of parent partnerships is the extent to which positive parent-provider partnerships can promote cultural congruence between home and early education settings. Cultural congruence, or cultural match, is one aspect of culturally responsive care, and it involves the extent to which various dimensions of continuity and discontinuity exist between the home and early childhood setting. Cultural congruence can be examined as a factor that influences children's development. Traditional standards and markers of quality in early childhood settings fail to take into account the extent of congruence between the values of the home and the early care setting, which is a distinctive aspect of the environment (García Coll et al. 1996; Johnson et al. 2003; Sanders 2016; Shivers and Sanders, with Westbrook 2011).

Certainly, compatibility between settings eases transitions for children and enhances communication between parents and child care professionals.

Some researchers have argued that because many home-based child care providers—such as family, friend, and neighbor providers—often share the ethnic heritage of the children and families they care for, they may provide care that is more aligned with families' values and practices than that provided by formal caregivers (Bromer 2001; Emarita 2006; Shivers and Farago 2016).

Overall, family and child care (or school) partnerships are not immune from the effects of living in a racialized society. Therefore, educators need to be aware of how their own biases, assumptions, identities, and experiences with race and culture impact their practices, policies, and relationships with the families and children they serve (McWayne, Doucet, and Sheridan 2019).



Culture and Routines

Another key way that teachers and providers of infant and toddler care can increase cultural responsibility in their caregiving environments is to pay thoughtful attention to the daily routines that unfold throughout the day. Routines in the context of early care and education can have different meanings for different people, but they are most often described as common, everyday activities, like feeding, diapering and toileting, and sleeping, that tend to unfold the same way every day. Gonzalez-Meña describes routines as “a powerful way of teaching . . . the everyday caregiving activities you engage in over and over again . . . [have] a profound effect on early development.” She argues that while engaging in routine tasks, teachers pass on important messages about how life should be lived. Indeed, our personal, professional, and cultural values are reflected in the way teachers and providers enact these daily routines with children (Gonzalez-Meña 2013; Tonyan 2017).

Cultural congruence comes into play when caregiving practices, like routines, that take place in the early care and education setting are consistent and in agreement with what is practiced in the homes of infants and toddlers. This congruency is beneficial for the development of young children. This aspect of caring for infants and toddlers requires careful consideration of a teacher's own beliefs and ongoing communication with families about their beliefs. Gonzalez-Meña notes that “even practices that are considered developmentally appropriate for infant and toddler child care settings are influenced by cultural, professional, and personal beliefs” (2013, 64). Many times, routines enacted in early care

and education can reflect mainstream, dominant ways of thinking about child development, and this may present conflict with families of infants and toddlers who come from racially minoritized communities. Understanding the goals that families have for their infants' and toddlers' development is key in negotiating what is considered high quality from the families' points of view. Families' goals are best understood when the cultural community context is taken into account (Tonyan 2017).

Domains of Anti-Bias Education and the Impact on Infants' and Toddlers' Social-Emotional Development

According to the anti-bias approach, educators need to be intentional about addressing human diversity and related prejudices with young children (Derman-Sparks and Edwards 2010; Derman-Sparks 2013). The goals of the anti-bias approach are as follows:

Goal 1: Each child will demonstrate self-awareness, confidence, family pride, and positive social identities.

Goal 2: Each child will express comfort and joy with human diversity, accurate language for human differences, and deep, caring human connections.

Goal 3: Each child will increasingly recognize unfairness, have language to describe unfairness, and understand that unfairness hurts. Furthermore, being able to think critically about the world is a skill important for later school success.

Goal 4: Each child will demonstrate empowerment and the skills to act, with others or alone, against prejudice and discriminatory actions (Derman-Sparks and Edwards 2010, 3–6).



Anti-bias practitioners view educators *and* children as active participants who can confront racism and other forms of oppression. Just like educators do not wait for children to ask about letters and numbers before teaching literacy and numeracy skills, educators cannot wait to address these topics until children ask about race and other aspects of human diversity (Farago, Sanders, and Gaias 2015). In some cases, children may ask questions about physical differences and other issues related to diversity, while in other cases they may not; either way, it is the educator's responsibility to initiate conversations (Derman-Sparks and Edwards 2010). Kimura, Antón-Oldenburg, and Pinderhughes (2022) suggest that teachers need administrative support to implement anti-bias practices, space and opportunities for self-reflection, and a community of learners, risk takers, and collaborators.



It is theorized that anti-bias messaging and interactions around race and culture can support children's positive peer relationships with diverse peers, positive racial identity development, perspective-taking abilities, and ability to identify, name, and interrupt injustice. One study has found that equitable social interactions between preschool teachers and children predicted higher level executive functioning in children, such as higher cognitive and pre-academic functioning

and social competence (e.g., social skills and behavior) (Curenton et al. 2022). Equitable social interactions included the following dimensions: teachers challenging the status quo knowledge,² teachers providing equitable learning opportunities, teachers providing equitable discipline practices, teachers connecting classroom learning to home life, and teachers personalizing learning opportunities. One example of an equitable social interaction in the dimension of challenging status quo knowledge might include the frequent reading of books to toddlers that highlight nontraditional families (e.g., same-sex parents, grandparents raising children, foster families) doing everyday things together.

Overall, repeated exposure to anti-bias and anti-racist messages is needed, and anti-bias curricula need to be interwoven into the everyday fabric of classroom activities. Discussing race and racism on special holidays or during specific times of the year is at best ineffective and at worst reinforces stereotypes (Derman-Sparks and Edwards 2010). For resources and readings on anti-bias early education, visit the [Anti-Bias Leaders in Early Childhood Education website](#).

As caregivers seek to nurture the social-emotional development and learning of all infants and toddlers in care, they need to attend to supporting each child's racial, ethnic, and linguistic identity and sense of belonging. Caregivers can be intentional in using strategies that range from reflecting

² Challenging status quo knowledge is one of four dimensions of Dr. Curenton's assessment observational tool known as the assessing classroom sociocultural equity scale (ACES). Sample items of this dimension include the following: teacher presents topics and materials that show racially minoritized learners in positions of authority and having agency; teacher encourages children to question social, scientific, and historical facts; teacher creates a space for children to talk about sharing and fairness; teacher encourages children to have their own opinions and ideas; teacher includes storybooks and other materials that explore social justice and equity themes (Curenton et al. 2022). Although these items apply mainly to preschool and elementary school children, early age-appropriate conversations about sharing and fairness and the inclusion of storybooks and other materials also apply to toddlers. In addition, the strategies for older children are included for programs that serve older children as well as infants and toddlers.

on their own biases, assumptions, and beliefs about race to making sure that their caregiving practices and environments provide for cultural congruence and give anti-bias and anti-racist messages to infants and toddlers and their families. Weaving attention to the impact of race into infant and toddler caregiving practice is essential to minimize the negative effects of bias and prejudice.

We close this chapter with a list of strategies care providers can use in their infant and toddler care programs. These strategies hold the potential not only of supporting young children's social-emotional growth and learning and overall development, but also of laying a strong foundation for positive racial and ethnic identity development throughout infancy and toddlerhood.

Attending to Race and Culture in Early Social-Emotional Growth and Learning: What Caregivers Can Do to Support Infants and Toddlers and Their Families

- Self-reflect on your own biases, assumptions, and beliefs about race.
- Self-reflect, interrogate, and change any classroom practices, such as disciplinary practices, that may perpetuate racial disparities.
- Learn from and listen to parents and children, especially parents and children of color, about their identities and experiences.
- Develop partnerships with families and learn about how they address race, racism, and culture in the home and what they do to foster positive racial and cultural identity development in their children.
- Communicate with families about their care routines and practices at home and seek ways to bridge children's culturally based care at home with the care provided in the infant and toddler program.
- Invite family and community members of color into your classroom to share their stories.
- Learn about children's home languages and integrate those languages into your practice.
- Examine your classroom materials to ensure they accurately reflect racially and culturally diverse families.
- Seek out books, toys, and resources from authors, artists, and others of color.
- Design activities and experiences for children that allow them to express their racial and cultural identities.
- Promote cross-racial friendships and interactions.
- Answer children's questions about race honestly. Do not dismiss, ignore, or silence them.
- Correct children's misperceptions and stereotypes about race. Find out what children know about race by asking questions.
- Find out children's and families' preferred racial labels.
- Use accurate racial labels and identifications such as "Black" and "white."
- Seek out a community of early childhood professionals who are committed to racial justice.
- Be brave and bold in addressing race and racism with young children, and seek out resources to support you in this effort.

Resources

Here are a few resources regarding race and culture. Many of these also address other aspects of diversity.

Recommended Websites

www.EmbraceRace.org

www.antibiasleadersece.com

Recommended Books

California Department of Education and WestEd. 2009. *California Infant/Toddler Learning & Development Foundations*. Sacramento, CA: California Department of Education. <https://www.cde.ca.gov/sp/cd/re/documents/itfoundations2009.pdf>.

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Creating Nurturing Relationships with Infants and Toddlers

J. Ronald Lally

For infants and toddlers to prosper in group care, caregivers have to form sensitive and responsive relationships with each child. Such relationships are important to children of all ages but particularly so to infants and toddlers. A caregiver's sensitivity and responsiveness strongly influence how each child in care will act toward and feel about the other people around them. If the caregiver is reasonably responsive to the baby's message, when the baby cries, they come; when the baby acts shyly, they do not force the baby to make contact. The caregiver can give a positive tint to the lens through which the child looks at life.

A caregiver's responsive behavior has the following effects:

- The child learns at a young age that they can have an effect on the outside world and can make things happen.
- The child is encouraged to send more messages, to keep reaching out. The child will use and sharpen their communication skills because the child learns that communication works.

- The child builds self-esteem, learning "I am someone who is paid attention to—I am worthy."
- The child's feelings of security, trust, and confidence in the world are nurtured.

Caregivers can learn to be more responsive by getting in the habit of following a three-step responsive process. These three steps blend into a natural "dance" that both the child and caregiver enjoy.



The Responsive Process

The three steps in the responsive process are *watch*, *ask*, and *adapt*.

Step One: Watch

The caregiver should try to see the world in the way that a particular infant sees it. The caregiver does everything possible to understand how the infant experiences life.

The caregiver begins interactions with an infant or toddler by simply watching the child. By watching first and not just rushing to do things for the baby, a caregiver can avoid the mistake of reacting before receiving the full message from the child. The caregiver looks with both eyes, listens with both ears, and gives the child time to get a message across. The caregiver watches for both verbal and nonverbal messages.

The caregiver tries to get in the habit of constantly gauging the child's actions. They pay attention to all the channels of communication that are available to babies. The caregiver watches how babies curl their toes, arch their backs, widen their eyes, wave their arms, and grow quiet. With older children, the caregiver watches their many gestures.

For example, if children tug at their hair, sit apart from other children, or lie curled toward the wall, they are probably experiencing fear. Adults will be surprised at how much they can learn by watching.

In daily contacts with an infant or toddler, caregivers need to remember that they must be willing to choose the role of learner for part of the time. Only by first learning what the infant or toddler is calling for can a caregiver choose the right response. Being a learner means spending a lot of time observing, “reading” the child, figuring out what message they are sending—not only the sounds and words but also the facial expressions, hand gestures, and other body language. Sometimes learning means getting right on the floor with the child and seeing things as the child sees them.

By observing the child, caregivers will see things that require immediate attention, such as signs of physical discomfort or hunger. Caregivers will also get to know the child; they will find out over time what the child's special interests and preferences are and how they can build on those interests to establish a nurturing relationship. By being willing to pay close attention, by making this kind of observation part of the caregiving style, they will also discover the child's particular temperamental traits—how active or shy the child appears to be, what kind of attention span the child has, how adaptable to new things the child is. In addition, when caregivers pay attention to the messages of the child, they will quickly discover what does not work and can try something else.



Step Two: Ask

After watching for a while, teachers and caregivers step back into their adult role and ask themselves how they might set up the environment—the emotional, intellectual, and physical climate; the social setting; and their personal behavior—in ways that will assist the child the most.

When they begin each new encounter with a child, they allow for the possibility that they may not know what the child likes or is like on that day. They ask the child with their movements and their words. Magda Gerber, one of the most highly respected trainers in the field of infant care, believed that this role of asking should be taken very seriously:

I go so far as asking the baby, the two-week-old baby or younger, “I see you seem unhappy. What can I do? I don’t know what makes you unhappy, but I want to learn it.” I think by asking, you invite the baby to give you the answer and be a partner.

Teachers must ask, “What messages is the child sending? What are the emotional parts to the message, the intellectual parts, the physical parts, and so forth?”

For example, teachers see that the child seems really to enjoy playing with toy cars. Teachers guess that one way to engage or relate to the child might be through joint play with cars. One way to ask the question is to introduce cars to the relationship and see what happens. Teachers might also ask, “What message am I sending? What am I bringing to this relationship?”

Sometimes teachers and caregivers do not understand a child’s message because their own feelings get in the way, causing them to misread or simply not see and

hear what is really happening. Part of tuning in to another person’s emotional messages is being aware of one’s own feelings and emotional states. The more clearly caregivers understand what is going on inside themselves, the more likely they will read and respond appropriately to a child’s signals.

Caregivers need to ask themselves about two kinds of feelings, those of the present moment and those from the past. The feelings of the present moment include the caregiver’s level of energy and mood. Is the caregiver feeling tired, tense, irritable, or in good spirits? It is important to attend to one’s feelings and to realize that one continually communicates them.

Children are so sensitive to the adults with whom they interact that they pick up easily on feeling and tone. The feelings from the past are more complicated because they come from one’s own childhood experiences. Often those emotional patterns continue to influence a caregiver as an adult even without the caregiver’s awareness of the fact. If past emotions are not acknowledged, they may interfere with a caregiver’s ability to read a child’s messages clearly and may even cause the caregiver to respond in inappropriate or harmful ways.

Becoming aware of how emotional experiences from the past affect one’s behavior in the present is an ongoing process that takes practice. Just by being willing to look at the connections between past feelings and events and present experience will bring a new awareness to caregivers’ work. The following example shows what a caregiver named Carol learned about herself when she was willing to ask herself about the connections between her past and present experiences.

Carol began to notice that she was bothered by a child who had a tendency to take away toys from younger children. She also noticed how the child's actions irritated her and even made her feel angry. She could not stand the way the boy acted. She saw that her interactions with the child left her feeling upset, worn out, and defeated—and she blamed the child.

Rather than leave things that way, Carol looked inward. Reflecting on her own childhood, Carol remembered how she had felt when her older brother used to take her toys away and hide them—how her brother would ignore her protests.

When she turned to her mother to intervene, her mother most often would tell her to work it out herself. Carol experienced again those feelings of frustration and anger that had come over her when she had to deal with the situation as a child.

Sometimes, untangling intense emotional reactions to a child or to a particular kind of behavior in children is very difficult. At such times one should ask for help from another caregiver or a supervisor. Another person's view of the situation may shed light on “blind spots” and “hot spots” carried over from childhood.

When Carol became aware that emotional responses from the past were getting in the way of her care of the child, her feelings about the child began to change. She asked another caregiver to observe her and the child and to offer suggestions about different ways she might handle the situation. She found that having another caregiver's view was very helpful. She realized that her current feeling of intense anger limited her ability to provide the child with constructive choices and had more to do with her than with the child. Instead of being overwhelmed and upset in the face of the child's provocative behavior, Carol began to focus much more clearly on what was happening in the present with the child and to devise strategies for action.

Becoming a sensitive caregiver requires learning about oneself as well as the children served. Teachers' and caregivers' emotional reactions to different children and to certain behaviors are a big part of care. Staff members need to look inward and consider their feelings. Knowing one's “hot spots” and “blind spots” makes a caregiver more effective.



Step Three: Adapt

While caregivers continue to watch and ask, they engage the child. As they engage the child, they will collect valuable information. They may learn that the child does not like to share but does like to show things to others or to use objects to establish closer contact with teachers. Caregivers may find that the child wants to be left alone. They adapt their actions in accordance with what they learn: let the child be, show interest in what the child shows them, or allow the child to get on a lap because the child seems to be asking for that.

A caregiver's action does not have to be a direct response to the child. The environment may be altered to make it more interesting to the child—for example, teachers may put more objects on the floor or they may try to interest some other children in peer contact. The point of the caregivers' actions, however, should always be linked to their reading of the child. They watch carefully how the child responds to the conditions set up and the actions taken. Then they modify the conditions or actions based on what they learn from the child's responses. They continue to learn and make adjustments until they feel they are providing what the child needs.

The role of adapter is the most creative part of a teacher's relationship with infants and toddlers. Caregivers need to look at the child's reaction to the hug they gave, the question asked of the child, the activities the child engages in, the decision made to leave the child alone to see how they handled things, and they must adapt subsequent actions based on

the messages the child sent in response to what was provided. They ask questions: "How close was I in my original guess about what this child needed?" "What is the message now?" "How should I change my behavior, revise the environment, or alter my opinions about this child based on what the child is telling me and on what they need?" "How must I change conditions or my actions so that I can better meet the needs of this child?"

Adaptation and Age

One reason continued adaptation by caregivers is important is that infants change so quickly. The ways in which caregivers provide care will change as the child grows from infancy to toddlerhood: teachers will move more into the background as the child becomes more competent to provide for self.

Adapting to the Needs of Young Infants

The very young infant who is not yet crawling usually needs the caregiver to provide care in a physical way by bringing things to them—food, a clean diaper, objects to hold or suck—or by taking them to sights, sounds, and people, out in the sun, or next to a couple of toddlers. The infant also needs consistent, loving contact with the caregiver—to see the caregiver's face, hear a reassuring voice, feel the warm, skin-to-skin contact. Consistent nurturance can help the infant feel confident that someone is there who will provide for their needs. Exactly how caregivers go about doing that for a particular infant depends on the things they learn about the child in their day-to-day use of the responsive process.



Adapting to the Needs of Mobile Infants

The crawler, new walker, or young toddler, because of their mobility, can often go after what they want. The child can come to the caregiver, go to food, and avoid things that are unpleasant. The young mover needs a caregiver who provides opportunities to experiment and to take risks in an environment that is safe, interesting, and healthful. At this developmental stage, caregivers are not bringing the child to things or things to the child as often as they did with the younger child. Instead, they arrange or create environments and possibilities that allow interesting things to happen.

The caregiver's role is to set things up in the young mover's environment to make it safe and easy to explore. In that way a caregiver automatically gives many confidence-building messages. In other words, when the environment is ordered with the "mover" in mind, the caregiver's message is: "Explore. Do things you choose because I have confidence that you will be safe and make interesting

discoveries." The specific experiences and the kinds of environments provided for particular children must grow out of careful observations as caregivers interact with the children.

To support the development of a secure attachment with the caregiver, emotional availability is particularly important at this age. The child often likes the caregiver to be a secure base, someone who is available but not intrusive. Sometimes caregivers may withhold their full presence from children, afraid that being completely accessible will use them up or perhaps spoil the child. This withholding is analogous to a waitress averting her eyes from those of a customer at a table so she will not be called over. But caregivers cannot read the child's signals or provide appropriate, reassuring contact without attending to the child. So caregivers must be generous with their attention. Unlike the inattentive waitress, their frequent eye checks say to the child, "If you want me, you've got me."

It is wonderful and emotionally settling to the mobile infant to look up and see that the caregiver is there if needed. When a caregiver's eyes meet those of the child and send messages of love and reassurance across the room, the child receives the message they are looking for. The unspoken messages to a child, "I'm here if you need me" and "I'm proud of your exploration," help instill the confidence that the early toddler usually requires. What the child gets through this kind of emotional interaction is reassurance not only of the materials of growth (food, a safe and interesting environment, hugs), but also of the caregiver's willingness to let the child choose and explore on their own: "I have confidence in your competence."

Adapting to the Needs of Older Infants

The older infant with good language and movement skills has the ability for abstract thought. Here the caregiver's role shifts focus again. For the relationship to work, caregivers have to understand that at this age the child is not only learning about the many choices available to them, but also coming to understand that individual responsibility accompanies choice. The whole notion of individuality becomes central to the older infant's development. Having mastered walking, climbing, and combining words, the older infant begins to develop fantasy in thought and language, as well as a feeling for past and future. The child at this stage of development may see others as a barrier to getting what they want, but also may begin to see the positive side of cooperation. The older infant often shows

their developing sense of self by resisting others or saying no. The infant also takes pride in their own creations. The child needs a relationship with a provider who will support the child's curiosity, independent action, and creativity. At the same time, the child needs tactful help to see how the child's curiosity, creativity, and independent action affect the people with whom the child shares space, as well as the environment and other living things. The caregiver becomes a kind of sounding board by letting the child bounce off of them the child's growing sense of what is acceptable or unacceptable. With the right sounding board, the child's creativity, curiosity, and independence continue to blossom while the child learns how to cooperate in daily routines, how to take care of toys, and how to respect the rights of others.

The Evolution of Responsive Care

The more the steps of the responsive process (watch, ask, adapt) are practiced, the more responsive the caregiver becomes with the child. The process of watching, asking, and adapting—the core of a responsive caregiver–infant relationship—happens hundreds of times a day. When caregivers are truly tuned in to the children they serve, the process becomes second nature. They realize that watching, asking, and adapting are always interconnected in the daily give-and-take of caregiver–infant relationships. Once caregivers understand the process, they blend the three steps into a natural dance that both partners enjoy.

Tips for Getting in Tune

Caregivers are to be attentively respectful. They observe without interfering. They spend time quietly looking and listening—leaving the child’s psychological space intact—without interrupting or breaking into the child’s activity. A caregiver must

1. Be an asker. Ask the child through words and actions what is right for the child: “I wonder what is motivating Mei-ling?” “I wonder what José is interested in this morning?” The caregiver asks, “Is what I’m doing meeting the child’s needs?”
2. Pay attention to one’s own feelings and gauge the part one’s feelings play in the relationship.
3. Keep in mind one’s own special emotional inclinations—one’s “hot spots” and “blind spots.”
4. Watch as one acts. When taking an action, watch while doing it and, not going too fast, giving the baby time to show a response from which the caregiver can learn something.
5. See behind the action. A caregiver must not just see an action or behavior, but must also see the reason and emotion behind the action. An older infant scribbling on the wall, for example, may be so consumed with trying out the new line-making skill that the infant may feel the act of making lines on any surface should be rewarded.
6. Use the information learned about children and child care—how children develop, how to be responsive to cultural differences, how to set up environments, how to use materials—to assist in the adaptation process.
7. Pay special attention to what has already been learned from interactions with each child in one’s care.
8. Use all the information artistically to create a unique exchange with each child.

The Developing Brain and Its Importance to Relationships, Temperament, Self-regulation, and Coping with Stress

Ross A. Thompson, Janet E. Thompson, and Julia Luckenbill

Caregivers have several lenses that, like magnifying glasses, enable them to view more clearly the development of young children. Our past experience with infants and toddlers focuses our attention on their changing needs. The guidance of more knowledgeable caregivers sharpens our awareness of how to contribute to healthy growth. For some, being a parent deepens everyday interactions with young children.

In recent years, another lens has contributed to our understanding of early development. Brain development research has added new insight to the early growth of the mind and the importance of caregiving influences (Thompson 2001). We have learned that conversing, playing, and sensitively responding to infants and toddlers strengthen brain connections that provide a basis for lifelong learning. Brain development studies also provide new insights into social and emotional growth. The “scientist in the crib” is revealed by developmental neuroscience to also be a socially insightful, emotionally animated human partner.

What do current studies of brain development contribute to our understanding of early social relationships, temperament, self-regulation, and coping with stress?

The purpose of this chapter is to profile what we have learned and what it means for caregivers of infants and toddlers. To illustrate the latter, we include examples of caregivers and young children that highlight the interactive strategies we describe.

Relationships and Social Understanding

One of the amazing discoveries yielded by developmental brain research is that beneath the apparently casual play of a young baby is a powerful mind at work (Bachleda and Thompson 2018). This mind is rapidly expanding in the early years as neurons connect, form networks, and build the architecture of the brain. As a result, infants are learning the sounds of language, cause and effect, basic concepts, and even simple number reasoning in the early months of life (Gopnik, Meltzoff, and Kuhl 2000).

The same powerful mind also contributes to early social and emotional understanding (Meltzoff and Kuhl 2016). For example, during the first six months of life, babies begin to

- experience and express joy, interest, sadness, anger, fear, and other emotions;



- identify differences between an adult's facial expressions of sadness, anger, and joy, and understand the emotional meaning of different vocal intonations (such as a warm, melodic tone versus a harsh, angry tone);
- feel resonantly with another's emotional expressions, such as responding with happiness to a caregiver's expressions of joy, or responding with distress to an adult's angry expressions;
- participate in face-to-face play with their caregivers, involving the back-and-forth volleying of social signals (such as eye contact, smiling, and vocalizing) and responding to the partner's social behavior;
- distinguish the characteristics of familiar and unfamiliar people; and
- develop expectations for the behavior of people they see regularly, and associate those people with familiar routines and experiences.

We used to think of young children as egocentric, but we no longer do (Thompson 2008b). From very early, they seem to be aware that what is in another person's mind might be different from

what they are thinking and feeling, and they show lots of interest in connecting with other minds. One way they do so is through joint attention, in which one-year-olds follow another's gaze to see what they are looking at, or point to get an adult to look at what interests them. In each case, the baby seems to understand that what you are looking at is in your mind, so creating joint attention is one way of "sharing minds." Joint attention is important not just to social interaction, but also to language development and social understanding.

By the middle of the second year, toddlers begin to recognize themselves in a mirror and develop a deeper sense of self, including feelings of pride (when others applaud their accomplishments) and guilt and shame (when others criticize what they have done). Their understanding of other people is also changing. For example, toddlers understand that people act according to their desires and feelings, and that people's desires differ. An eighteen-month-old gives broccoli rather than crackers to an adult for a snack after the adult has clearly shown a preference for eating broccoli, even though the toddler prefers the crackers (Repacholi and Gopnik 1997). Toddlers of this age are hesitant to play with an attractive toy after watching an adult respond angrily to another adult who played with the same toy (Repacholi et al. 2014). They are learning how to respond from their observations of other people and the feelings and desires they perceive.

These accomplishments reveal that the young child is learning something important about other people: *a person's internal state—feelings, desires, intentions, thoughts, and beliefs—affects that person's behavior.*

Young children are sometimes confused about *what* other people feel, think, and intend, but they strive to make sense of what is going on in other people's minds because they know it is important to understanding why they act as they do. As preschoolers, they will extend this understanding as they learn more about the influence of a person's thoughts and beliefs.

Thus, the same rapidly developing brain that is the basis for early achievements in language, concepts, and problem-solving is also the foundation for remarkable advances in social understanding and emotional responding (Thompson 2016). This new lens on early development is causing scientists and practitioners to revise their earlier beliefs about social and emotional development (like egocentrism), just as it is revising understanding of early cognitive growth.

Nurturing Social Understanding in Infants and Toddlers

These discoveries are important for how caregivers communicate and connect with young children. Even though their actions may not show it, infants and toddlers take in much more of the social world than we often expect. They are sensitive to the emotions of adults and other children, often looking for explanations of why another child is crying or an adult seems upset. Our words can help them begin to understand the causes of other people's feelings and, in some instances, the reasons for their own emotions. Our words can also help young children become more emotionally perceptive: saying, "It hurt Katia when you hit her" can focus the child's attention on a consequence of their action that might have been overlooked.

Toby, eighteen months old, watches another child. His caregiver says, in a calm voice, "Toby, you hear Manuel crying. He's sad because he fell down. His teacher is holding him and helping him feel better. I wonder if hearing him cry makes you feel sad, too? Would you like me to hold you?"

Our responsiveness to a baby's signals contributes to social understanding. A twelve-month-old grunts and reaches toward an out-of-reach snack, then looks to the caregiver to see if they are watching (creating joint attention) and whether they get the idea. When the adult moves the snack closer, the baby's experiment is confirmed: "I can change their mind!" The baby knows that their desires and goals can alter another's intentions—one person's mental state can affect another's. Every act of sensitive social understanding is, in a sense, a meeting of minds. And for the infant and toddler, these are the foundations of social understanding.



Angelo (twenty-three months) was seated in the block area. His caregiver, Eva, walked over. “Angelo, it’s time to wash hands!” she announced. She extended her hand toward him. “Carry Angelo?” he asked, extending his arms. Eva expanded his request: “You want me to carry you?” Angelo nodded. Eva bent down and lifted him to her hip, carrying him to the sink.

Talking to young children about their internal experiences also contributes to their self-understanding. When a caregiver uses words to identify a toddler’s feelings of sadness and can talk about why the child is feeling this way (e.g., Mommy just left for work), it helps young children understand the connections between their internal experience and its causes. This also contributes to social understanding.

What does this responsiveness require of a caregiver? It requires *mind-mindedness*. This is the term that researchers give to an adult’s attunement to the mental life of a baby (Meins 2013). Mind-mindedness is the difference between an adult who

responds to a baby’s cry by simply seeking to quiet the child and an adult who first seeks to understand why the child is upset. An infant’s actions are guided by the goals, intentions, desires, feelings, and other aspects of the baby’s rich internal life. Our mind-mindedness when interacting with a young child enables us to sensitively respond to the child’s internal experience. In becoming attuned to the child’s internal world, we also help the child begin to comprehend the internal states of other people.

Maria (fourteen months) and Martin (eleven months) were seated side by side next to a pile of small plastic dogs. Maria had gathered several of them into her lap and was holding onto them. Martin reached out and pulled one away from her. Sara, the teacher, said, “Maria and Martin, it looks like you both want that dog.” Both infants continued tugging the toy. Sara also held onto the dog. “I can see that you both look pretty upset,” Sara continued. Martin tugged the dog again, and it slipped from Maria’s fingers. He lifted it to his face. Maria frowned. Sara said, “Oh, it looks like Martin is holding it right now. Maria, you look sad. We can wait for it or find another one.” Maria looked down at her lap and found another one. She lifted it up. “You found more!” exclaimed Sara. “Now you each have a dog!”

Attachment

These brain-based achievements in early social and emotional understanding are the basis for the development of secure attachment relationships. As infants learn about the characteristics and responsiveness of their caregivers, their emotional



security becomes organized around these people (National Scientific Council on the Developing Child 2004b). At home and in child care, young children turn to trusted attachment figures, particularly in situations when they are alarmed, uncertain, or distressed and require the emotional support of these adults. Even during periods of exuberant play or quiet exploration, the availability of these adults provides a “secure base” for infants and toddlers to be confident that if help is needed, their attachment figure will be there.

A caregiver’s sensitive responsiveness is the most important determinant of whether a child’s attachment will be secure or insecure (Thompson 2013). Sensitive responsiveness includes being attentive to the child’s signals and following the child’s lead in interaction. It involves responding promptly and appropriately, especially when young children need emotional support. Sensitive responsiveness involves an emotional connection with the child that enables a caregiver to share moments of joy and distress. It incorporates the mind-mindedness mentioned above because it is attuned to the internal feelings, desires, intentions, and goals that motivate a child’s behavior. A secure attachment relationship at home or in child care is important for several reasons:

- Security provides confidence for infants and toddlers to explore the world and make discoveries for themselves within the protective orbit of the caregiver’s presence.
- Security contributes to the development of social skills and social understanding that enable young children to relate better to other people.



- Security enables young children to view themselves more positively, especially as being loved and lovable.

Developing Secure Attachment Relationships in Child Care

Family caregivers respond sensitively at home to nurture secure relationships with their infants or toddlers. Caregivers in child care can recognize and affirm the importance of these attachments. When caregivers talk about a child’s family caregivers, help parents during transitions with a child at the beginning and end of the day, and encourage children to bring photos of their families and beloved objects to help them through the day, all these activities provide a bridge between attachment relationships at home and children’s experience in child care.

Cruz (eighteen months) was new to the Infant Room. He toddled over to the family photo board. He pulled off his photo and gazed at it.



His lower lip trembled. Janae, his caregiver, walked over and knelt beside him. “Cruz, you look so sad. I see that you are looking at Mama and Papa. Mama will come back at circle time. She always comes back for you.” Cruz extended his arms to Janae. “I can give you a hug,” she said, “and I can hold you and keep you safe at school.”

Young children can also develop secure relationships with adults in child care, and these are important for creating safe, supportive emotional environments for them. Caregivers can help to create secure attachments with infants and toddlers when they become attuned to the internal experience of the children in their care and avoid being preoccupied by the routine “tasks” of providing care. As described in J. Ronald Lally’s chapter, this can occur through the three-step responsive process of

- *watching* the young child’s behavior with empathic attention to the child’s experience,
- *asking* how one might act in a manner that enables the child’s goals to be achieved, and

- *adapting* one’s actions according to a sensitive reading of the child’s response to them.

This responsiveness becomes more natural as caregivers become more familiar with the children in their care. It may be particularly important for the child who has selected you as the special adult to whom they turn for comforting, help, or sharing the excitement of discovery. It is important for infants and toddlers to have a special adult with whom they create a primary caregiving relationship of security and support. The young child organizes their emotional experience in child care around the teacher, and it is this secure attachment that is most important.

Elisa (fourteen months) was standing on the climbing stairs in the climbing area. Her lips were pursed, and her eyes scanned the room as she searched for her caregiver, Corey. When the two made eye contact, Elisa patted her chest and grinned. Corey also grinned and said, “I see you, Elisa. You climbed the stairs!” Elisa stepped down the stairs, toddled over to Corey, and gave him a huge hug, smiling all the time. Then she toddled back to the stairs and began climbing up again.

In addition to the sensitivity that children directly experience from a caregiver, children’s security in child care is also based on their observations of the caregiver’s sensitivity toward *other* children. Especially for children in larger groups, this group sensitivity can be as important as sensitivity directed toward the child individually (Ahnert, Pinquart, and Lamb 2006). Viewed in this light, everybody benefits from a classroom environment in which children experience security from adults’ responsiveness to their feelings, goals, and needs.

Temperament

Developing relationships means recognizing the individuality of each person. Babies are unique from birth. They differ in how active they are, how readily they express emotion, how easily they adapt to new situations, and in many other ways. Research on early brain development shows that these broad variations in temperament are based in brain systems that develop significantly in the early years of life. As a result, temperament also develops in infants and toddlers.

The chapter “Viewing Temperament as a Window for Understanding How Young Children Relate to the World Around Them” profiles the temperament traits that caregivers can identify in the young children in their care. The chapter identifies five dispositions: activity level; reaction to the unexpected; attention and regulation; anger, irritability, and frustration; and enthusiasm, exuberance, and cheerfulness. Each individual trait—and the patterns of traits taken together—help to describe the unique and emergent personality of the child.

In a broader sense, temperament can be described in two dimensions (Rothbart 2004):

- *Reactivity* refers to individual differences in the arousability of the child: how easily the child is moved to action. It includes temperament traits such as activity level; reaction to the unexpected; anger, irritability, and frustration; and enthusiasm, exuberance, and cheerfulness.
- *Self-regulation* refers to individual differences in managing these reactive tendencies. It includes temperament traits of attention and regulation.

These two dimensions of temperament are associated with brain systems that govern reactivity and self-regulation from birth. Concerning reactivity, certain early-developing brain and hormonal systems related to activity, emotion, and stress enable newborns to become engaged in everyday experiences and sometimes become highly aroused. For this reason, it is easy to see individual differences in the reactivity of very young infants. Concerning self-regulation, however, the brain systems that enable infants to manage their arousal and calm down take a longer time to mature. Some temperament characteristics emerge, therefore, as these brain systems mature over time. A five-year-old shows greater ability to self-regulate than a two-year-old who is, in turn, better capable of self-control than a newborn.

Temperament is also affected by experience. Young children who are frequently in difficult and stressful situations, for example, may become more irritable and reactive and less capable of self-regulation than other children. By contrast, an infant who is highly reactive to events can grow into a child who is capable of a balanced and self-regulated response with the support of sensitive caregivers.



Responding to Temperamental Individuality in Child Care

As in any relationship, appreciating the partner's individuality is important to mutual understanding. This principle applies to caregivers who are developing relationships with infants and toddlers. It may be helpful for caregivers to think of the temperaments of children in their care as individual differences in reactivity and self-regulation. *Watching* young children with these differences in mind can help adults *ask* how to respond to each child in a manner that *adapts* to each child's temperamental profile.

- A toddler who is typically emotionally reactive, for example, may need support in expressing strong emotions constructively, such as by seeking the assistance of an adult to solve the problem rather than responding by hitting or biting.
- A baby whose self-regulatory tendencies include withdrawing from new experiences, perhaps after a period of watching and indecision, may benefit from a caregiver who can provide a more gradual introduction to new experiences, such as trying new food or playing with unfamiliar peers. A patient adult may also recognize that an initial rejection does not necessarily predict this young child's later response.
- A young child whose low reactivity includes a preference for low activity may risk being left behind by other children unless a caregiver can help this child find others with a similar preference to engage in quiet play.
- A toddler whose impulsivity reflects low self-regulatory capacities may benefit from a caregiver who provides



reminders of the need to respect other children's activities and preferences. However, as described in the next section, the adult must also recognize young children's limitations in self-control.

Adults can create lifestyles for themselves that reflect their personalities and temperaments. They can choose rock-climbing expeditions, membership in book groups, meditation, or dance clubs based on their self-awareness of their characteristics and preferences. When adults are aware of their own temperamental qualities, it can help them understand how they tend to respond to children's temperaments. A caregiver who enjoys vigorous activity may participate more easily in active play with children who share that quality—but may have to make special efforts to enjoy quieter interaction with other children who are more temperamentally quiet and reserved.

Infants and toddlers, however, cannot create lifestyles that reflect their own

personalities and preferences. They need caregivers who create environments that respect the children's unique temperamental qualities. This may seem like an impossible challenge when a caregiver is with a group of several children with uniquely different temperaments. How can an adult individualize the experience of each child? Careful consideration of the physical environment and the daily routine is one way of doing so. Does the room provide young children with quiet, soft places for solo play as well as large spaces for noisy, active play? Does the daily schedule allow for alternating times of quiet activity alone (or in pairs) with periods of group activity? If so, it provides opportunities for children of different temperaments.

In addition, when caregivers sensitively monitor the group of children in their care, they may change planned activities to better fit the group (this is an example of group sensitivity). If circle time is not proving interesting, it may be time to move to another activity. If children are becoming too excited by group play, it may be a good idea to move to another activity sooner than planned. When caregivers do so, they increase the likelihood that whatever their temperamental profile, the infants and toddlers in their care will find a constructive place in the group. The chapter on temperament in this book discusses further these features of adapting to children's temperament.

Self-regulation

One of the common frustrations of parents and practitioners is the limited self-control of young children. Although many adults recognize that they cannot expect much self-management from infants and toddlers, their increasing reliance on explanations, incentives, and

appeals to self-image reveals their hope that young children will rapidly get better at controlling their own behavior. At times, this leads to inappropriate expectations. At home, parents may expect that toddlers will share their toys, stop crying, and cooperate when adults ask them to. At child care, the duration of circle-time activities may stretch the endurance of any two-year-old.

Research on early brain development confirms the wisdom of limiting expectations for self-control in young children. The areas of the brain that are most important for self-regulation are among the slowest to mature (Thompson 2009). Indeed, these brain areas—which are also associated with long-term planning and enacting complex activities—continue to develop into early adulthood. Infants and toddlers are thus taking their baby steps in the slow growth of competent self-control, and preschoolers are not much further along. Their abilities to focus their attention for a sustained time, control their impulses and emotions, and regulate their behavior (such as sitting still) are very limited. Because their brains take a long time to fully mature, young children's self-regulation also takes a long time to develop.

Supporting Self-regulation and Its Development

What does this mean for caregivers? Two things.

First, adults must be cautious in their expectations for young children's self-management. They must be particularly careful to distinguish their hopes that toddlers and preschoolers will manage their feelings, impulses, and attention from a more realistic understanding of what the children actually can do.



The problem is not that young children are egocentric. Rather, the problem is that they lack the cognitive flexibility to spontaneously inhibit their intended activity (whether it is a tantrum or taking another child's toy) in favor of an alternative course. This is a challenge not only to infants and toddlers, but also to older children and some adolescents because the brain areas necessary for inhibition mature slowly.

In addition, young children sometimes have difficulty remembering what to do or what is expected in everyday situations. Limited memory skills can make it easy for them to forget why they started to put away toys (in preparation for snack time) and to become easily distracted by another activity (such as playing with different toys). Memory skills are part of self-regulation, and these take time to mature, too. Caregivers must be patient and realize that young children are not being deliberately uncooperative or intentionally defiant.

Second, caregivers can make it easier for young children to manage their behavior, feelings, impulses, and desires. The schedule of daily activities and organization of the classroom make a big difference in bringing self-regulatory challenges down to a level that young children can manage. To create a manageable environment for self-regulation, caregivers can use the three-step process of *watching*, with empathy, how young children manage everyday challenges; *asking* how they can better help children accomplish their goals; and then *adapting* the classroom and behavior accordingly. Caregivers can do the following:

- Design a predictable daily routine so young children can anticipate, and plan for, what happens next and manage their feelings and expectations accordingly.
- Create an organized, consistent classroom environment in which young children can find plenty of toys and materials when they need them, know where to go for different activities, and leave activities that are overarousing, upsetting, or uninteresting.
- Break down complex activities into smaller parts. If it is time to transition from play to snack time, for example, adults can guide young children through the process (such as first putting away toys, then washing hands, and finally sitting down at the table) in separate steps.
- Provide memory aids for what to do next, such as a wall chart with pictures to identify each step of the daily routine, a song to accompany transitional activities (such as cleanup), or a picture-card display to signify the next activity.

- Create a quiet space where young children can retreat to resettle themselves when needed, and help children find that space when they need it.
- Pay attention to signs that children are becoming overaroused, bored, or competitive for limited attention or resources, and adjust activities accordingly. Caregivers can also provide a balance of quiet and active periods in the daily routine.
- Use words to communicate understanding of what children are feeling, wanting, or struggling with, and help children communicate their feelings to other children.
- Offer instructions that focus on what young children *should* do rather than on what they *should not* do (because young children have difficulty inhibiting their activity). When intervening with a child engaged in a prohibited activity (such as climbing onto the snack table), acknowledge what the child wants to do (i.e., climb) and offer an alternative (e.g., going to the climbing area in the room or outside).
- In the blocks area, Rasheed, Elena, and Lucas love building structures together. But their play sometimes ends in conflict when the children fight over who gets to position the two pieces that can make a bridge. After watching them, caregiver Olivia manages to find some additional bridge pieces so that all three children can make bridges. In another part of the room, Logan and Riley enjoy jumping off stairs and onto the mattress, but sometimes another child wanders in the way and gets hurt. Rather than ask the children to

be more careful, caregiver Maya moves the stairs and mattress to a more out-of-the-way location, and also positions two chairs to cordon off the mattress from other children.

It is also important to recognize that young children differ temperamentally in their self-regulatory abilities. In any group there are some young children who are more self-controlled than others. It is easy for caregivers to wonder why the other children cannot be more like them. But that is the wrong question to ask. The right question is why these young children are more capable of self-regulation, and the answer is that often they are higher in temperamental self-regulation. It is not that there is something wrong with other children; rather, it is that these children have a temperamental assist that the others do not.

Although self-regulatory challenges will remain for many years, children's success in self-control relies both on brain maturation and on the caregiver's sensitivity to children. Caregivers can scaffold the everyday experience to make self-regulation more manageable, enabling children to take pride in their abilities to accomplish goals.



Coping with Stress

Stress is part of life, even for young children. Indeed, we would not wish for their lives to be free of stress, because stress helps children learn how to cope with difficulty. But for this to happen, stress must be within manageable limits, and children must be provided support for learning how to cope. As you have seen in this chapter, supportive relationships provide the assistance that infants and toddlers need most when managing difficult situations. These relationships provide children with safe, predictable, protective assistance.

Stress can have different sources. In child care, children naturally encounter situations that are upsetting or frightening as they play and interact with other children. At home, young children may be living in changing or unstable conditions, with families in emotional difficulty, a parent who is stressed or depressed, or in an unsafe residence or neighborhood. These experiences are deeply felt by an infant or toddler, and some children may be temperamentally more prone to stress than others. In these situations, children often arrive at child care showing signs of the stress they are experiencing. They may be irritable, overreactive or withdrawn, more prone to frustration and sadness than usual, and showing less self-regulation than other children. It requires a sensitive caregiver to notice these changes in children's behavior and to understand that they are stress related rather than the child simply being difficult and uncooperative. Sometimes the emotional problems of an infant or toddler in child care are the first signs to another that a child and a family are in difficulty.

These stress reactions occur because the brain is capable of responding to stress from birth (Thompson 2014). Brain areas and hormone systems combine to make stressed young children more emotionally reactive and anxious (as they do for stressed adults). When stress is temporary, these responses can assist in coping with the stressful event (such as by standing up to a bully) and then they subside. But when stress endures over long periods, it can make these brain systems more sensitive to threat or danger, and more reactive. Over time, chronic stress can undermine a child's physical and mental health (National Scientific Council on the Developing Child 2005).

This is why it is important for a young child to be able to rely on the sensitive care of a special adult in child care. A secure attachment to this caregiver helps to reduce the stress response and protect the developing brain from the potentially hazardous influences of prolonged stress. In addition, caregivers can put into words the experiences and feelings of the child, help the child have a positive classroom experience that will support self-confidence and coping, and be alert for other stressors on the child that can be avoided. Over time, and with the adult's assistance, the child can be helped to manage these stressful situations in a constructive way.

Conclusion

Research on early brain development has sharpened the awareness that a young child's relationships, temperament, self-regulation, and ways of coping with stress are based on brain development. The young brain's rapid growth means that infants and toddlers are more socially aware and emotionally sensitive than is commonly believed. And caregivers have opportunities to contribute to young children's understanding of the social world and to their development of emotional attachments which help them to manage the stressful experiences that inevitably occur. However, the brain areas related to self-regulation mature slowly; therefore, caregivers must guard against expecting too much of young children's ability to manage their attention, feelings, and impulses. Brain development research is also relevant to understanding reactive and self-regulatory features of a child's developing temperament, and how children respond to stressful experiences and are helped to cope with them.

There are many practical implications of this knowledge for how caregivers interact with infants and toddlers in child care (see also California Department of Education 2010). Remarkably, when caregivers use knowledge of relationships, temperament, self-regulation, and coping with stress when designing care environments and experiences for infants and toddlers, as described above, they create experiences that also nurture developing brains. Young children's brains need

- warm relationships to provide the security necessary for learning and to help reduce the effects of stress,
- the support of a predictable daily routine and an organized environment to support immature brain regions that govern self-regulation, and
- sensitive care so that temperamental qualities can unfold in a healthy and constructive manner.

A high-quality early learning environment for infants and toddlers is much different from a high-quality learning environment for older children (Thompson 2008a). One reason for this is the developing brain, because in the early years, the developing brain especially needs rich learning environments characterized by warm relationships, lots of social interaction, rich language, choices of activities based on curiosity and discovery, and invitations to active learning. When caregivers use the best practices in early care and learning, they nurture brain development in young children.

Because children's developing brains are shaped by their experiences, caregivers are creating the environment and experiences that shape the further development of their children's minds, hearts, and brains.

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Viewing Temperament as a Window for Understanding How Young Children Relate to the World Around Them

Elita Amini Virmani, Emily Newton, and Peter L. Mangione

We all have our own temperamental tendencies based on unique combinations of genes, biology, and experiences that develop within a cultural context. In the 1950s, Alexander Thomas, Stella Chess, and colleagues began The New York Longitudinal Study of infant temperament (Thomas et al. 1963). This clinically based study examined individuals' behaviors and characteristics over the course of decades. Thomas and his colleagues found that from infancy through childhood, children tended to have a stable pattern of characteristics that they labeled "temperament traits." These traits included activity level, biological rhythms, approach/withdrawal, adaptability, quality of mood, intensity of reactions, sensitivity threshold, distractibility, and persistence/attention span. Approximately 65 percent of the children in Thomas and Chess's research fit the pattern of one of three categories based on how these traits clustered together: easy, difficult, or slow to warm up. When PITC first developed resources and training about temperament, Stella Chess wrote a chapter for the first edition of this guide and presented a session on temperament at the first PITC institute

for trainers in 1990. The work by Thomas and Chess was foundational for helping parents, providers, and researchers understand the importance of temperament and became the primary resource for the PITC approach to temperament.

Over the past 30 years, many different researchers have followed up on Thomas and Chess's original research on temperament. Researchers have used a variety of data collection methods, including structured questionnaires, direct observations, and physiological measures of variables such as stress responses and brain activity. This research has shown us that temperament is far more complex than originally thought. For instance, some of the original nine dimensions identified by Thomas and Chess are not distinct from one another (e.g., approach/withdrawal and adaptability are closely related). In addition, the three general temperament types—easy, slow to warm up, and difficult (or what the PITC video on temperament calls flexible, fearful, and feisty)—are not as common nor as stable during development as was once thought. Researchers using newer measurement techniques have been unable to consistently replicate the combinations of temperament traits

found in the original clinical research. Just as noteworthy, research in the fields of genetics and neuroscience have revealed that temperament shapes and is shaped by the dynamic interplay of genetic and environmental influences.

The goal of this chapter is to provide an updated understanding of temperament and its practical application informed by the foundation set by Thomas and Chess and by the many researchers who have followed in their footsteps, such as Rothbart and Derryberry; Kagan, Buss, and Plomin; and Goldsmith and Campos (Potmesilova and Potmesil 2021). This updated perspective on temperament balances an understanding of genetics and environment, takes into account the stability and variability of temperament, honors family and early care and education perspectives, and relies on a diverse body of research and a deep understanding of practice. In this chapter, we will first describe our updated concept of temperament, dispel some myths about temperament, and consider how our cultural lenses influence our perception of different temperament tendencies. Second, we will identify and describe five temperament tendencies and provide strategies for supporting children who differ in how high or low their responses reflect each of the tendencies. Third, we will offer an updated approach to the concept of “goodness of fit.” Lastly, we will connect the PITC Six Essential Policies (primary care, small groups, continuity of care, individualized care, culturally responsive care, and inclusive care) to the support of children who have different temperament tendencies.

How Do We Define Temperament Now?

Temperament refers to the physiological, emotional, and behavioral ways in which infants and young children relate to their experiences in the world (McClowry, Rodriguez, and Koslowitz 2008). It includes a combination of tendencies that make up an individual’s natural way of relating to people, things, and events. While temperament tendencies are present at birth, they are not set in stone. Temperament tendencies are influenced by a complex interplay of genes and biology and develop in the context of one’s experiences and within a specific cultural context. Some of the ways in which infants and young children respond or react to their world and to the people in it may be more subtle than others. For instance, whereas one infant might cry loudly to express their



distress in reaction to an unexpected or unfamiliar person, another might become very still and quiet. Both might be having a physiological response to stress that is expressed distinctly. Although as caregivers of young children we might not always notice exactly how a child is feeling, when we cultivate an understanding that each child’s temperament tendencies impact the way they perceive and experience the world, we create the possibility for understanding the child more deeply. Temperament becomes a window into caring for young children that empowers caregivers to be attuned to the internal experiences of children in their care.

A current definition of temperament that has influenced our updated PITC approach to the topic is “early emerging basic dispositions in the domains of activity, affectivity (emotion), attention and self-regulation, and these dispositions are the product of complex interactions among genetic, biological, and environmental factors across time” (Shiner et

al. 2012). This definition suggests that both genetic and environmental factors influence temperament from infancy onward. One’s temperament is a result of biological, genetic, and environmental factors working together and influencing one another throughout development. This definition also implies that, across time, temperament tendencies tend to become more stable. While temperament is not always stable in infancy, it tends to become more stable by preschool age and into later childhood and adulthood. This definition also gives us information about what types of behaviors or characteristics constitute temperament: activity level; affectivity, or emotions; attention; and self-regulation. If we compare these categories with those identified by Thomas and Chess, we can see that most of the nine traits they identified fit into one of these four categories. Table 1 below illustrates the connections between Thomas and Chess’s temperament traits and PITC’s temperament tendencies.

Table 1. Thomas and Chess’s Temperament Traits Mapped to PITC’s Temperament Tendencies

Thomas and Chess’s Temperament Traits	PITC’s Temperament Tendencies
Activity level	Activity level
Biological rhythms	Attention and regulation
Distractibility	
Persistence/attention span	
Adaptability	
Approach/withdrawal	Reaction to the unexpected
Quality of mood	Anger, irritability, and frustration
	Exuberance, enthusiasm, and cheerfulness
Intensity of reactions	Intensity
	Duration
Sensitivity threshold	Threshold

As caregivers of young children, we might notice temperament tendencies at the extremes. For example, some children are always on the go, whereas others move at a slower pace. Some attend for long periods of time to the task at hand, whereas others quickly shift their attention from one activity to the next. Still others might startle easily in response to an unexpected person in their environment, whereas others hardly notice (Saudino 2005). How adults respond to individual differences they observe in group care affects each child's developing sense of self and ability to regulate their temperament tendencies. As early care teachers become adept at understanding temperament tendencies, they are able to more clearly appreciate the child's perspective and are better able to meet the child's needs.

Dispelling Myths About Temperament

Many ideas in our collective knowledge about temperament that come from what we have learned in trainings, workshops, or classes or from colleagues do not always reflect the most current research. In this section, we highlight three myths about temperament and what the current thinking tells us about them.

Myth 1: Temperament Is All Genes and Biology.

At one time or another you may have read or heard that temperament is genetic or biological, which implies that temperament is something that children are born with and will never change. However, if we take a more nuanced view of genes and biology, we come to understand that

both can play a powerful role in impacting and having a dynamic influence on temperament. As Saudino states, "Genes are dynamic in nature, changing in the quantity and quality of their effects across time and, therefore, can be sources of change as well as continuity in behavioral development" (Saudino 2005, 218). **Thus, although temperament is influenced by genes and biology, we now also know that children's early experiences play an important role in shaping the ways in which genes and biology impact temperament tendencies** or the ways in which children (actually, all of us) relate and respond to the world around us.

Further, we now know that constitutionally based individual differences—or the differences that young infants are born with—are affected by the environment both before birth and after birth. Some of the many factors that can affect the prenatal environment of the infant include hormones, nutrition, air quality and pollutants, maternal stress, and alcohol, drug, and medication use. For example, a number of studies (see Korja et al. 2017 for a systematic review of the literature) show that unusually high levels of maternal stress and prenatal exposure to cortisol (a hormone that increases with experiences of stress) are related to infants' affectivity and regulatory capacity. This research provides important insights into the ways in which early experiences impact infant temperament and, in particular, how maternal stress impacts the temperament dimensions of anger, irritability, and frustration and attention and regulation in infancy. Early experiences impact the temperament tendencies we see in children in our care.



Myth 2: Temperament Is Stable Throughout Childhood.

We now know that some temperament tendencies are less stable than previously thought. The temperament–environment match is a developmentally dynamic one, and this dynamic is likely to influence the stability of temperamental attributes over time (Thompson, Winer, and Goodvin 2010). Remember that temperament is influenced by genetic, biological, and environmental factors across time, and each of these factors is variable—even the ways in which genes are expressed at different ages. **This variability means that temperament can also shift in response to the interplay of genetic, biological, and environmental factors.**

Research shows us that extremes in any temperament dimension tend to be more easily observed. For example, given that we do not always notice how children react to the unexpected if their reactions

are fairly mild, we may not appreciate how stable these temperament tendencies may be. But we definitely notice a child's very strong reactions to new things. In effect, we tend to focus on the extremes of temperament, which may make them appear more stable, rather than notice the more subtle shifts in children.

Myth 3 : Some Temperament Tendencies Are Risk Factors.

In fact, the role that temperament plays as it relates to developmental risk is much more nuanced than the possibility that some temperament tendencies are risk factors. One of the most fascinating topics of current temperament research is that, based on their temperament, children are differentially susceptible to the influence of their environment. This means that the same temperament tendencies that make some children especially vulnerable to adversity may *also* make them more likely to benefit from additional support (Ellis, Boyce, and Belsky 2011). For example, children who are higher in irritability and frustration are more adversely affected by low-quality caregiving conditions, *but they also* benefit more from positive caregiving conditions (Boyce and Ellis 2005; Ellis, Boyce, and Belsky 2011). The same holds true for infants who react fearfully to unfamiliarity. Groeneveld and colleagues (2012) found that infants who reacted with fear to the unexpected appeared to be affected more than their peers were by the quality of care they experienced. Thus, when children who displayed more fear were cared for by professional caregivers who were more stressed (as evidenced by caregiver increase in cortisol over the course of the day), these children scored at the lowest levels regarding well-being in child care. However, when cared for by caregivers who were unstressed, children

who displayed high levels of fear scored *higher* on a measure of well-being in child care than did even their less fearful peers (Groeneveld et al. 2012). Although all infants and toddlers need caregivers who are responsive to their cues and needs, infants and toddlers who respond to unfamiliarity with greater fear and distress may especially benefit from being cared for by well-regulated, unstressed caregivers.

In summary, while some temperament tendencies (e.g., irritability and reaction to the unexpected) have historically been perceived as “risk factors,” these tendencies can be better understood as “plasticity factors” rather than risk factors (see Belsky 2013). Understanding that the quality of care dramatically impacts the way temperament influences the course of a child’s development fundamentally changes the way we think about caring for infants and toddlers. This notion implies that the way we provide care and support matters, especially in cases in which temperament tendencies have been shown to function as plasticity factors. As early care and education providers, we have the power to make a remarkable difference in the lives of young children when we come to understand and respond with nurturance and support to those whose temperament tendencies may require more effort, care, and patience. It may be helpful for early care teachers and family members to keep in mind that children with particular temperament tendencies, such as higher levels of irritability or higher levels of reactivity to the unexpected, are like orchids that thrive when cared for especially tenderly.

Differing Views of What Is “Ideal”

As children bring their own histories of being cared for that are deeply rooted in their cultural ways of knowing, we too bring our own experiences and cultural histories to our work with young children. As Gilbert, Goode, and Dunne (2007) state, “Culture is the learned and shared experience of the world. It comprises beliefs about reality, how people should interact with each other, what they ‘know’ about the world, and how they should respond to the social and material environments in which they find themselves.” What we bring to the care environment influences how we respond to temperament tendencies of young children. Our experiences and histories are a rich part of our identities and contribute to the people we are and to the close relationships we have with children and families. The values of our cultures and subcultures can also influence our perceptions and judgments of temperament. We each come to our interactions with children with our own cultural lens. That lens has an important impact on how we perceive the temperament tendencies of young children and on the importance or value we place on different temperament dimensions.



Let's take an everyday example from the life of one of the authors of this chapter. The author's daughter, Lily, tends to be cautious around new people, especially people who try to touch her. Lily's pediatrician, although an excellent medical practitioner, tends to take a businesslike approach with young children. This pediatrician would check Lily's ears without asking whether it was okay with her, and never described the steps of any procedure ahead of time. Lily would withdraw from this kind of interaction and sometimes cry. When Lily pulled away from the doctor at her three-year well-child visit, the author said, "Oh, she's pretty cautious with new people." The doctor immediately started asking whether Lily was in preschool or a play group, whether she was getting interaction with other adults or children outside of her family, and how she acted with other children at the park. The doctor was coming from a cultural perspective that shyness is not ideal and that, instead, Lily needed to learn how to be more comfortable interacting with new people and to be willing to interact with them.

Neither of these perspectives is wrong—it is not wrong to value shyness or to value sociability. Rather these perspectives reflect different values and, often, goals that individuals, families, and cultural groups have for children and adults. Even so, it is important to think about the message we give to children when we place judgment on different temperament tendencies. From the interaction with her doctor, Lily heard the message that her way of being was at least a little wrong in the eyes of her doctor and that her doctor did not think her cautiousness was appropriate or the right way to be, even though her parents were not concerned about it. If a child care provider gave Lily that message



every day, it could affect her sense of self and self-esteem. She could start to believe that there is something wrong with her because she does not conform to the ideals of the adult caring for her. Luckily, instead Lily has teachers who have gently fostered her sociability while continuing to give her the message that her feelings are valid and that she is valuable just as she is.

Why is valuing children just as they are so important? Given the beautiful diversity of family cultures and values in the United States, there are several different ideas for what is ideal when it comes to a child's temperament. **To be responsive to children, we need to recognize that there are different values related to temperament and that there is no one right perspective. Each individual's perspective is rooted in their own cultural experiences, and each culture is valid.**

In keeping with PITC's Six Essential Policies, we strive to promote family and cultural continuity. During the first three years of life, children are developing a sense of who they are in the context of their family and community. They are also learning what their caregivers value and do not value. To understand and meet the expectations of caregivers, infants and toddlers need to receive consistent messages about how to act in the world. PITC believes that parents and families are the most important teachers of young children and that it is critical for care teachers to learn from each family what they value and what child-rearing strategies they use so that the early care and education program can support those practices.

How we interact with children depends on which lens we see them through. If we look at them through a negative or deficit-based lens, our response to their actions is likely to be more critical and less supportive. When we look at them through a positive or strengths-based lens, we are in a better position to be their champion and supporter (Kurcinka 2015). Temperament likely influences all the behaviors we observe in children—the infant who cries often, or the child you are struggling to soothe, or the toddler who is intensely focused on a task. Seeing a child's behavior through a negative lens and using negative labels to describe their behavior can activate our own stress response—our fight-or-flight system—and we feel our response physiologically. Our hearts race, our breathing speeds up, our pupils dilate as we try to take in more information. These reactions can be so subtle that we do not realize they are happening. But when we are in this state of anxiety and fear,

it is difficult to respond empathetically to children, maybe impossible. We are in what Mary Kurcinka calls the “red zone”: instead of drawing us toward children, negative labels “ready us for battle” (2015, 22). When we pause to see children as having strengths and can reframe behaviors that may seem frustrating to us as benign or positive, we are more likely to be able to self-regulate, which helps us adapt to and connect with children.

Temperament Tendencies

Temperament tendencies have been described in myriad ways by different researchers over the past 30 years, and the field has not yet reached consensus on one specific list of temperament traits or dimensions. For PITC's updated approach to temperament, our goal was to determine common themes across the current literature on temperament that we could use to inform how we support care teachers to be responsive with infants and toddlers. What we found are several common temperament dimensions defined across researchers that are largely related to activity level, regulation, and emotion. What follows are brief definitions of the temperament tendencies that reflect the current state of the field.

Activity Level

Across all the temperament literature, activity level³ is consistently seen as an integral temperament tendency. Activity level refers to the strength and intensity (e.g., vigor) of the activity and to the speed (e.g., tempo) of motor movement and vocal expression. The focus is on how a child moves through space and how they vocalize in that space.

3 Of the five temperament tendencies, activity level and reaction to the unexpected have been found to have greater relative stability over time. Greater relative stability is indicated by rank order stability. In other words, a child who is more active than their peers will likely continue to be so over time.



Reaction to the Unexpected

Reaction to the unexpected refers to a child's tendency to act fearful or show distress in the face of new or unfamiliar activities, settings, objects, and people.

Attention and Regulation

Attention and regulation centers around the child's ability to voluntarily regulate their emotions and behaviors. Early in infancy, this temperament tendency largely refers to an infant's ability to focus, sustain, and shift attention as needed. While children show remarkable individual and developmental differences in this temperament tendency, it is also one that develops rapidly over the course of the first few years of life.

Anger, Irritability, Frustration

The tendency regarding anger, irritability, and frustration⁴ refers to (1) how intensely a child tends to experience and express these and similar emotions (intensity), (2) how easily these emotions are activated (threshold), and (3) how long they last (duration).

Exuberance, Enthusiasm, Cheerfulness

The tendency regarding exuberance, enthusiasm, and cheerfulness refers to (1) how intensely a child tends to experience and express these and similar emotions (intensity), (2) how easily these emotions are activated (threshold), and (3) how long they last (duration).

All of these temperament tendencies work together and are influenced by one another. For example, a child who tends to be active and less able to regulate attention will be experienced differently by caregivers than a child who is less active and regulates attention well for their age. In addition, the expression of a temperament tendency such as anger and irritability may be impacted by developmental shifts in attention and behavioral regulation, with greater capacity to regulate emotions affecting a child's tendency to exhibit anger and irritability.

⁴ In the research literature, anger, irritability, and frustration are often identified as negative emotionality and negative affectivity. Even so, at PITC we are intentional about describing the expressions of emotion rather than using labels that suggest that some emotions are inherently negative. Instead of a label that prejudices any given emotion as negative or positive, we have learned in our work with early childhood educators and administrators that information on temperament is most useful when it describes a child's temperament tendencies and how to work with those tendencies in a responsive, supportive way.

Viewing Temperament as a Window for Understanding How Young Children Relate to the World Around Them

As we apply our understanding of infants and toddlers in the early childhood classroom, we need to pay attention to various aspects of the temperament tendencies. When we approach supporting an infant or toddler, we can ask ourselves the following questions:

- What does this child's temperament tell me about what they need from me?
- How should I respond to this child differently based on what I know about temperament?

As providers, we may at times be inclined to try to treat all children as similarly as possible. But viewing temperament as a window for understanding children's behaviors and experiences provides a rationale for relating to children as individuals, each with different needs. Being informed about temperament can help caregivers see that treating everyone the same will not work when children have different ways of relating to the world. Once we understand each child's unique mix of temperament tendencies, we can consider the kind of support each one needs from us.

This section briefly defines each of the temperament tendencies and then discusses the ways in which caregivers can support children who are high, moderate, or low in the expression of that tendency.

Activity Level

This temperament tendency refers to the strength, intensity, and speed of motor movement and vocal expression.

Children lower in activity level tend to observe and move more slowly and vocalize more quietly. For example, Duri is a toddler who often sits quietly reading in the book area. Sometimes you might not even notice he was there unless you checked. In contrast, children with high activity levels may always be on the go and may move or vocalize quickly or loudly. Another child, Alexander, is a toddler who runs from one side of the room to the other, climbing on the bookshelf to get a closer look at the fish tank, looking over to see if his caregiver is looking, and then calling out loudly across the room. Note that activity level is neutral in emotionality and can be coupled with any emotion. It is not always obvious early in development whether a child has a tendency toward larger and faster or slower and smaller motor movements and vocalizations. As children become more competent in their motor movements and more confident in their vocalizations, you see differences emerge more consistently.

As you think about the temperaments of children in your care, we invite you to note the ways in which the environment might be set up for both the child who displays higher activity and the child who displays lower activity. How do infant care teachers support these children with different temperaments? As you might imagine, some aspects of environments support all children, no matter how high or low their activity levels. But the environment might also be adapted to support children with different temperament tendencies.

Take a moment to jot down a few ways you might imagine teachers setting up the environment to support a child with higher activity levels. How about a child with lower activity levels? How might a child's low activity level affect how visible this child is to caregivers in the early childhood setting? What happens when a child is not very vocal? What kind of temperament characteristics get overlooked? A child who displays lower activity or has a lower voice might get lost in the group care context more easily than children who display higher activity do. What are some strategies that caregivers might use to make sure a child who is quieter and less active is seen and heard? What might caregivers do to engage such children?

Reflect on the children in your care and jot down strategies that would support children who are less active or quieter.

What are the characteristics of the care environment that are necessary to allow care teachers to attend to each child's unique temperament? Finally, consider the differences in the way in which each child's strength and intensity or lack of intensity of vocalizations affects the care teachers' response. How does the child's activity level affect how a caregiver might or might not respond to the child? What strategies are effective for caregivers to use in relation to the temperament tendencies the child exhibits?

Activity Level: Recommended Care Strategies

Caregiving strategies that support children with all activity levels (**low**, **moderate**, and **high**):

- Implement PITC's Six Essential Policies of primary care and small group size.
- Acknowledge the effect of children's behaviors on others.

For children **high** in activity level:

- Provide ample opportunities for large motor movement and loud vocalizations.

For children **low** in activity level:

- Acknowledge subtle communication of children who are quieter.
- Offer opportunities for them to participate in the group in less active, quieter ways.

Reaction to the Unexpected

This temperament tendency refers to the level of distress or fear a child experiences when faced with something unexpected or something new. This child's response can be physiological, which can make it hard to observe because often it is happening within the child and is not always expressed outwardly.

Low reaction to the unexpected: A child with a low reaction to the unexpected

readily approaches new situations and tends to be sociable with unfamiliar people. A baby or toddler with a low level of this tendency is often fairly easygoing, able to engage socially with ease and not bothered much by new situations or people.

High reaction to the expected: A child who is highly reactive to the unexpected acts fearfully or is distressed when faced with unfamiliar activities, people, or objects. For example, a baby who is highly

reactive is likely to fall apart when interacting with an unfamiliar nurse. Brain science suggests that the amygdalae (the area of the brain that helps us attend to and process incoming potential threats) of children who are highly reactive to the unexpected is on higher alert than those of their peers. It is thought that the amygdalae of children high in this temperament tendency might be more easily activated, which would alert the brain to be attentive to something that might be unpleasant (Clauss, Cowan, and Blackford 2011).

Older toddlers who are highly reactive to the unexpected may withdraw or actively move away from a stimulus, such as the toddler who hides behind a mom or a dad. As stated earlier, a physiological response in a child who is highly reactive can be

difficult to observe, especially in older toddlers as they develop more regulatory strategies. This underscores the importance of a continuing relationship with the child that allows their caregiver to know them really well and interpret their subtler behavior.

Take a moment to bring to mind a child who displays a high level of fear or distress in reaction to unfamiliarity. What is this child's reaction telling us about what the child needs? As you consider this child, what are the qualities of the temperament the child is displaying? What is the quality of the teacher's interactions with this child? How does the way the teacher engages with the child honor the child's temperament tendency? What interactions seem to be effective? How can you tell?

Reaction to the Unexpected: Recommended Care Strategies

Caregiving strategies that support children with reactions to the unexpected **ranging from low to high**:

- Let children know ahead of time when a transition or something new or unexpected is going to happen.
- Follow children's leads when you introduce new experiences.

For children **high** in reaction to the unexpected:

- Introduce new experiences gradually.
- Allow them more time to move into new experiences and interactions.
- Be available as an emotional support, and provide a physical connection by staying close.
- When the child has engaged in a new activity or is playing with a new child, acknowledge it with a positive statement: "It looks like you are having fun playing with _____."

For children **low** in reaction to the unexpected:

- Encourage the child to observe a situation briefly before jumping in.
- Support the child in managing potentially risky situations.

Attention and Regulation

This temperament tendency refers to the ability of a child to voluntarily regulate their emotions and behaviors. Children show remarkable individual differences in this temperament tendency, and it is also one that develops rapidly in all children over the course of the first few years of life. Early in infancy, this temperament tendency largely has to do with an infant's ability to focus, sustain, and shift attention as needed. At the end of the first year of life, some aspects of behavioral and emotional self-regulation can be seen as children develop more control over their attention and start to have some control over their behaviors and emotions in the context of their relationships.

The self-regulation component of this temperament tendency is dynamic and develops gradually through the support of the caregiver. Although a child's self-regulation develops through co-regulation with a caregiver, it also differs based on temperament. There are individual differences in self-regulation among children based on their physiology *and* experiences. Caregivers can foster self-regulation in different children based on their individual temperament tendencies. How a child shows up in the world is based partly on how the child's caregivers co-regulate, or foster and scaffold behavioral regulation.

Attention and Regulation: Recommended Care Strategies

For **all children**, provide developmentally attuned support of their development of attention and regulation.

For children **low** in attention and behavioral regulation:

- Engage with the child in activities that support their ability to focus and sustain attention.
- Allow the child to explore the environment at their own pace.
- Avoid trying to shift the child's attention from one object or activity to another too quickly or unnecessarily.
- Provide opportunities for the child to practice inhibiting responses, waiting, and controlling impulses.

For children **high** in attention and behavior regulation:

- Consistently use developmentally attuned strategies to support children's continuing development of attention and regulation.

For guidance geared toward **children aged eight months, eighteen months, and thirty-six months:**

Eight months: Observe how children are directing and sustaining their attention, and observe their ability to control their behaviors.

- Be responsive to what children are focusing on, and engage in shared attention with them regarding what they are showing an interest in.

- Avoid overstimulating children when playfully interacting with them (e.g., if they are engaged or focused on an activity or social interaction, allow them to dictate the pace of the interaction).
- Provide a peaceful, calm environment that allows children to focus their attention without distractions.

Eighteen months: Give full attention to your role in supporting children's developing behavioral regulation.

- Anticipate children's responses and direct their attention to the important aspects of their environment.
- Provide guidance to children in order to support their development of behavioral and emotional regulation.

Thirty-six months: Attend to children's behavioral regulation capacities and provide guidance based on observations.

- Explain the reasons for rules.
- Help children talk through and solve the problem of a challenging situation.
- Acknowledge children's efforts when they are showing some effortful control.

Anger, Irritability, Frustration

This temperament tendency refers to the degree to which an individual experiences and expresses emotions that communicate upset and concern.

These emotions are expressed on three levels: intensity, threshold, and duration. A child who expresses the emotions of anger, irritability, and frustration with high intensity and long duration can be especially challenging for care teachers. Even so, continuing to listen and observe

as the child expresses the emotion is essential because the child's emotional reaction might alert us to a situation or stimuli that could set off a reaction in other children if it continues. If we help the child work through the issue that led to the expression of emotion, we open up the possibility of learning not only how to support the individual child more effectively, but also how to support the other children in the group.

Anger, Irritability, Frustration: Recommended Care Strategies

It is helpful to start first by developing an understanding of intensity, threshold, and duration prior to responding to expressions and experiences of emotions in group care:

- **Intensity:** What is the strength of the infant's or toddler's typical emotional reaction?
- **Threshold:** What is the level of provocation or stimulation at which the infant's or toddler's emotion is activated?
- **Duration:** How long does the infant's or toddler's emotional reaction typically last?

For infants and toddlers who express **high-intensity** anger, irritability, or frustration:

- Observe actions or situations that might lead a child to respond with intense anger, irritability, or frustration so you can anticipate the expression of the emotion.
- Provide anticipatory support by being emotionally attentive and physically available.
- Design the environment to minimize the chances that intense emotions will be activated (e.g., try to provide multiples of desirable play materials).
- Validate children's emotional responses while also supporting appropriate and respectful expressions of anger, irritability, or frustration.
 - Be very specific about what part of an infant's or toddler's behavior needs adjustment when a child has hit, pushed, or forcefully taken something from another. Avoid saying the child's emotion is inappropriate or trying to change the child's emotion.
 - Model respectful ways to express anger, irritability, or frustration.
 - Suggest to children appropriate ways that they can express these emotions.

For infants and toddlers who tend to express anger, irritability, or frustration for a **long duration**:

- Make sure that these infants and toddlers feel that they have a special relationship with someone who is looking out for them and cares for them. Have that special person be emotionally available to the child and supportive throughout the time that the child expresses the emotion.
- For infants and toddlers with a **low threshold** for expressing anger, irritability, or frustration:
- Observe actions or situations that might lead a child to respond with intense anger, irritability, or frustration so you can anticipate the expression of the emotion.
- Provide anticipatory support by being emotionally attentive and physically available.
- Design the environment to minimize the chances that intense emotions will be activated (e.g., try to provide multiples of desirable play materials).
- Maintain clear age- and child-appropriate routines that include songs or rhymes to signal and ease transitions. These routines can help minimize the possibility that the demands of a transition might reach a child's low threshold for anger and frustration during the transition.
- Provide calming and gentle touch for young infants (e.g., holding them or lightly stroking their back).

For infants and toddlers who express anger, irritability, or frustration at **low levels of intensity**, have **high thresholds** for expressing these emotions, or **only briefly** express these emotions:

- Check on them from time to time to make sure they are not dealing with a difficult or stressful situation even though they are not showing anger, irritability, or frustration outwardly.

Enthusiasm, Exuberance, Cheerfulness

This temperament tendency refers to the degree to which an individual engages in activity and relates to others with zest and enjoyment. Like the temperament tendency of anger, irritability, and frustration, the emotions of enthusiasm, exuberance, and cheerfulness are expressed on three levels: intensity, threshold, and duration.

- High levels of intensity, low threshold, and long duration are related to frequent smiling and laughing, high-intensity pleasure, and positive anticipation and eagerness.

- Low intensity and a long duration are related to a contented, pleasant affect or a sunny disposition.

Children who exhibit high levels of enthusiasm, exuberance, and cheerfulness are often engaging and fun to be with. Other children might be drawn to and imitate a child who expresses these temperament tendencies. Sometimes a child who tends to express enthusiasm and exuberance with too much intensity, without being able to control the emotional reaction, needs guidance and support to regulate the emotions they are experiencing. A calm, supportive response from the care teacher at such a moment is important for the child as well as for the other children in the group.

Enthusiasm, Exuberance, and Cheerfulness: Recommended Care Strategies

As with irritability, anger, and frustration, when working with the expressions and experiences of emotions in group care, it is helpful to keep an understanding of intensity, threshold, and duration in mind before responding:

- **Intensity:** What is the strength of the infant's or toddler's typical emotional reaction?
- **Threshold:** What is the level of provocation or stimulation at which the infant's or toddler's emotion is activated?
- **Duration:** How long does the infant's or toddler's emotional reaction typically last?

For infants and toddlers who express **high-intensity** exuberance, enthusiasm, or cheerfulness:

- Acknowledge a child's enthusiastic response or joy. When an exciting activity is overstimulating and dysregulating, help the child find quieter ways to express exuberance or enthusiasm.

- When these emotions override the child's ability to self-regulate, talk to the child about how one's feelings influence how one acts and affects others.
- Establish a calm tone and introduce potentially fun or exciting activities in a low-key manner that allows the child to regulate response to the fun or exciting situation (e.g., introduce small- and large-group activities with a calm song, rhyme, or finger play to help calm intense emotions and ease transitions).

For infants and toddlers who have a **high threshold** for expressing exuberance, enthusiasm, or cheerfulness and hardly show these emotions:

- Engage in cheerful interactions and support their engagement with you and with other children, even if their response is low-key.

How Enthusiasm, Exuberance, and Cheerfulness and Anger, Irritability, and Frustration Might Show Up in Individual Children

These two sets of temperament tendencies are not opposite sides of the same coin. In other words, a child can be very cheerful and also be quick to anger.

In fact, research suggests that infants who show the most joy and interest in activities often tend to be the ones who become most frustrated when prevented from engaging in those activities. The two types of emotional tendencies do not *always* go together, but they can. Descriptions of two children who were in the second author's early childhood classrooms early in her career illuminate how emotional tendencies might appear in different children.

Paz: In general, she was on the nonexpressive end of the spectrum of expressing emotions.

- **Low intensity:** Paz generally exhibited a little smile and a downturned mouth.
- **High threshold:** It took a lot of stimuli before Paz exhibited an emotional response. Other than separations from her parents when she first started care, I barely remember her ever crying, even as an infant. And if she did cry or express frustration, my colleagues

and I knew something was very, very wrong.

- **Low duration:** Paz hardly ever expressed her emotions, and if she did, they would come and go quickly. Most of the time Paz was on an even keel.

Paz's calmness actually made it hard to read her cues sometimes. It was sometimes hard to know whether she was enjoying an interaction or whether she would prefer to explore on her own. Paying close attention was necessary to be able to detect her emotional response.

Juana: Compared with Paz, Juana was on the opposite end of the range of expressing emotions.

- **High intensity:** Juana generally exhibited very strong feelings.
- **Low threshold:** Very little elicited an emotional response. The smallest provocation might result in big, loud feelings.
- **High frequency:** She expressed her emotions very often. This was true for all emotions, including exuberance and anger.

The second author's personal account of working with the two children in care is described below:

I will admit that I struggled to connect with Juana as a caregiver.

I felt that I had to constantly follow her and try to anticipate any possible expression of frustration or anger (which was impossible to do), and I felt like I hovered—I know now that I hovered—in part because her emotional responses felt dysregulating *to me*. Not until I had more opportunities to observe Juana's interactions with her family did I realize I was really laying my own perspective and judgment onto Juana's behavior. Her parents and her older brother all adored Juana, and they were so warm and tender and gentle with her. Her high activity level combined with her intense and frequent emotions were lovely to them. I realized that by watching Juana through her family's eyes, I could see she really was simply full of a zest and enthusiasm for life that extended through the whole spectrum of emotional experience.

By connecting with each family, valuing each family's perspective and behaviors, and continuing each family's practices in the child care environment, I learned a lot from both Juana's and Paz's families about supporting their children. In the case of Juana, I could support her and validate her intense and exciting emotional experiences while also helping her expand her ability to regulate her emotions.

In considering how different children express emotions, we need to keep in mind that what we observe does not necessarily reveal to us what the child is experiencing inside. It is important to listen and observe carefully to understand what the child is feeling or why the child is expressing a particular emotion. Whether a child expresses an emotion with intensity, with hardly any provocation, or for a long time

or expresses emotion with low intensity, with hardly any reaction to intense stimuli, or for a short time, we should respond with respect and support to the child's communication to us through their behavior. If we can approach each child's expression of emotion as a learner who is trying to make sense of what the child is telling us, we stand a good chance of finding ways to be responsive to the child and to help them manage the emotions they are experiencing.

The Role of Relationship Experience

Expressions of frustration or irritability may just look like general distress. For instance, with infants from birth to eight months, we try to notice how emotions are expressed and we ask ourselves what caused the infant's distress. In addition, what can we say about the child's threshold or the event that activated the reaction? How intense is the child's distress? How long does it last? As a caregiver, what can we do to support the child and, more generally, what can caregivers do to support children who have especially intense or long episodes of anger or frustration or even sadness?

When trying to understand a child's temperament, think about how important it is to get to know a child through an ongoing relationship. Judging a child's temperament-related behavior based on one interaction is practically impossible. You do not know if the child's reaction is related to temperament or to some other factor, such as a bad night's sleep. Knowing the child well matters in making sense of the meaning of their behavior and their temperament tendencies.

What Is Goodness of Fit?

“Goodness of fit” refers to how well a caregiver and environment support a child’s different temperament tendencies.⁵ It is an idea originally coined by Thomas and Chess that has endured the test of time. Goodness of fit begins with infant care teachers discovering each child’s temperament tendencies and considering how to provide an environment and caregiving practices that help children express their temperament tendencies in a regulated, effective way (Shiner et al. 2012). The full definition includes not only adaptation but also temperament-based strategies to **scaffold and stretch children’s emotional, attentional, and behavioral repertoires**. Goodness of fit is a combination of adapting to the child’s temperament and helping that child **expand their responses to various situations and their overall regulatory toolbox**.



It can be very helpful to consider goodness of fit by reflecting on your relationship with a specific infant or toddler, even if you are not very connected with them. As you reflect on your interactions with this child, what patterns do you notice that allow you to support them? What patterns do you notice that at first were hard to understand and know how to support? How does the child’s temperament tendencies influence your ability to connect with and be in tune with them?

Above all, in applying the idea of goodness of fit, we need to see our understanding of a child’s temperament tendencies as a starting point. What research tells us about temperament is that it develops as the individual child develops. Responsive care is informed by an understanding of not only temperament but also how temperament develops in each child. In an ongoing relationship with an infant or toddler, we continually observe and listen to the child in order to adapt to the child’s temperament tendencies, co-regulate with the child, and scaffold our responses to support the child’s development of new ways of relating to the world around them.

⁵ Sometimes people mistakenly think that goodness of fit means that a caregiver’s temperament must match the child’s temperament (e.g., a child with a high activity level should have a caregiver with a high activity level). Instead, it refers to creating a match between the kinds of interactions and environments a caregiver provides and the child’s temperament tendencies.

PITC's Approach to Responsive, Relationship-Based Care Is Key

At the heart of the PITC's approach to relationship-based care are the Six Essential Policies of primary care, small groups, continuity of care, individualized care, culturally responsive care, and inclusive care. When implemented, these policies support the development of responsive caregiving relationships with infants and toddlers. An understanding of temperament works hand in hand with the PITC philosophy of care.

The new research on temperament helps us understand what to look for when we observe and listen to children in order to be responsive to them. It also tells us that understanding a child's temperament tendencies is not a matter of figuring out what a child's temperament is and

then always responding to them in the same way. Rather, an understanding of temperament helps us anticipate, based on the child's tendencies, what their response to a situation might be and what kind of support they might need. To be truly responsive and provide a goodness of fit, we also have to be open to the possibility that the child might respond to a given situation differently at any moment. Being surprised by responses that differ from our understanding of the child's temperament tendencies can add to the wonder we experience in our relationships with infants and toddlers.

Through an ongoing primary relationship, caregiver and child learn to appreciate and respect each other for who they are and to experience together the child's exploration of new ways of relating to the world as they continue to develop.



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From Early Empathy to Acts of Kindness

Jennifer Marcella-Burdett and Catherine Tsao

What might a more compassionate world look like? A world where people consider their own and others' emotions? A world where people act out of care and concern for others? While the experience of empathy may vary between individuals, we are all born with the ability to connect with others. In the first days of life, newborns give cues to their caregivers, and responsive caregivers strive to meet their needs. These dynamic interactions reflect the earliest points of connection between infants and caring adults. As caregivers notice an infant's emotional state and respond to it, they help set the foundation for the child to understand their own emotions and eventually attune to the emotional experiences of others. All caregivers of infants and toddlers possess the immense responsibility and privilege to honor the emotional experiences of young children and foster their innate potential to share in the emotional experiences of others. Consider this scene in an infant and toddler care setting:

An older infant cries when his grandmother drops him off in the early morning. The caregiver holds his hand as they walk over to a cozy space to sit together. She says, "You sound very sad to say goodbye to abuelita this morning." A nearby peer looks over with concern and chimes in, "Isaiah sad," as she toddles over to Isaiah's cubby to retrieve his teddy bear. She brings the stuffed animal to Isaiah, whose tears start to lessen.

These acts of compassion depict the focus of this chapter. This chapter will explore what the science of child development tells us about the earliest foundations of empathy during infancy, including the key facets of empathy and how empathy develops over time. Individual and environmental influences on empathy development are highlighted, with a particular focus on caregiving strategies to support young children's early empathy as part of healthy social and emotional development.

Why Is Empathy Important?

Empathy is the developing ability to share in the emotional experiences of others (CDE 2009). It involves the “set of processes enabling an individual to attend to, understand, and attune to the feelings, bodies, and minds of others by directly observing or imagining their emotional states” (Ornaghi, Conte, and Grazzani 2020, 1). For young children, empathy is an important part of their social and emotional development. When caregivers of infants and toddlers experience empathy toward children, they may provide care that is more sensitive and responsive, which supports the development of a secure attachment relationship. This secure attachment relationship then contributes to a child’s later abilities in developing empathy and responding prosocially in appropriate situations.

Children’s early empathy is related to their overall social competence, as empathy may impact how children behave in social interactions and the quality of social relationships they form. Sharing in the emotional experiences of others contributes to healthy, close relationships with family members, peers, and teachers.

Beyond these individual and relational benefits, empathy potentially leads to greater societal and collective compassion. A young child who possesses the sensitivity to feel another’s emotions and consider their perspectives can contribute to their acting kindly and compassionately in day-to-day interactions and in times of need or distress. Such skills lay the foundation to prevent larger social issues, such as bullying or othering of children from different backgrounds. Whether in schools, the workplace, or the full global context, social problems arise—pandemics, wars, systemic racism. Empathy

fosters connection and cooperation among humans, can help resolve social problems, and has the power to drive societal change and collective impact.

What Is Empathy?

Empathy includes three neural processes (Ornaghi, Conte, and Grazzani 2020; Zaki and Ochsner 2012):

- experience sharing (i.e., affective empathy),
- mentalizing (i.e., cognitive empathy), and
- prosocial concern.

Experience Sharing

Experience sharing, or affective empathy, is the ability to recognize, share in, and respond to others’ emotional experiences. Even very young infants show an emerging ability to respond to the emotional experience of another when, for example,



they cry upon hearing another baby cry or smile when a caregiver laughs. This ability, known as *emotional contagion*, is an example of emerging affective empathy. As infants develop their abilities to recognize and share in the emotional experiences of others, they are building skills that represent one facet of empathy.

Mentalizing

Mentalizing, or cognitive empathy, includes theory of mind and the ability to understand the perspectives of others. Young children begin to develop theory of mind, or the ability to recognize that others have mental states that may be different from one's own, during the preschool years. In addition, they become more able to consider the perspective of another in order to understand why a person may feel or act a certain way, as well as think about ways to support that person. Caregivers of infants and toddlers can plant early seeds of cognitive empathy when they model concern for the child's perspective or help the child recognize the perspectives of others (e.g., "How do you think Ella feels when you knock over her block tower?").

Prosocial Concern

Prosocial concern refers to an individual's motivation to improve the experience of another person (Zaki and Ochsner 2012). Neuroscience research has recently suggested that prosocial concern may come from either the neural process of experience sharing or the process of mentalizing, depending on the context (Zaki and Ochsner 2012; Zaki 2014). When children share in the emotional experiences of another individual and begin

to think about that person's perspective, these feelings and thoughts can lead to prosocial responses. For example, when a preschooler observes a friend fall down, the neural process in the preschooler's brain of *sharing the experience* of their friend's emotional reaction leads them to help their friend in pain. However, if the same preschooler does not observe their friend fall down but is asked to consider their friend's perspective (e.g., "I wonder how Jamil feels when he falls down"), then it would be the preschooler's ability to *mentalize* that would lead them to help their friend. Research has shown that different situations activate the different neural processes of empathy, which result in helping behaviors.

Taken together, empathy during early childhood includes the following set of related competencies (Walsh and Walsh 2019):

- understanding one's own emotions
- regulating one's own emotions
- identifying the emotions of another person
- understanding that another person has mental states that may be similar or different from one's own
- considering the perspective of another person to imagine how they may feel or what they may be experiencing
- considering ways to respond to the emotions of another person, ranging from celebrating a joyful experience to helping someone in distress feel better

Development of Empathy

The multifaceted skill of empathy develops over time through both maturation and socialization processes (Walsh and Walsh 2019). Understanding the typical development of empathy helps caregivers have a better idea of when to intentionally support young children's affective empathy, cognitive empathy, and prosocial behaviors. The developmental progressions of empathy provide the foundation for how to support its development in early childhood settings.

From birth, young infants show an awareness of the emotions of others. Newborns and young infants display emotional contagion, such as reflexively crying when another infant cries. As infants develop in the first eight to nine months of life, they increasingly show greater awareness of others' feelings by reacting to a range of emotional expressions, such as smiling when someone smiles at them or stopping

their play to look at a nearby child crying (CDE 2009). By the end of the first year of life, mobile infants attend to and show concern for the emotions expressed by others (Ornaghi et al. 2017; Ornaghi, Conte, and Grazzani 2020). For example, a mobile infant may look at their caregiver for how to respond when a nearby peer begins to shout in frustration.

At around eighteen months, older infants change their behavior in response to the feelings of others, even though they may not make the other person feel better. For example, an older infant may try to hug or pat the back of a crying peer or move their own body away from a child who is crying loudly. Children around this age show an increased understanding of the reason for another's distress and may become distressed as well (CDE 2009). Older infants progress to show age-related increases in empathic concern (McDonald and Messinger 2011). From sixteen to thirty-six months, toddlers show their



understanding of the emotional expressions of others by labeling emotions, asking questions about emotions, or even responding in appropriate nonverbal ways (e.g., bringing a favorite toy to a child who is crying, smiling to share in another child's excitement) (Office of Head Start 2015). By about thirty-six months, children understand that people have feelings different from their own and can sometimes respond in ways that make the person feel better (CDE 2009).

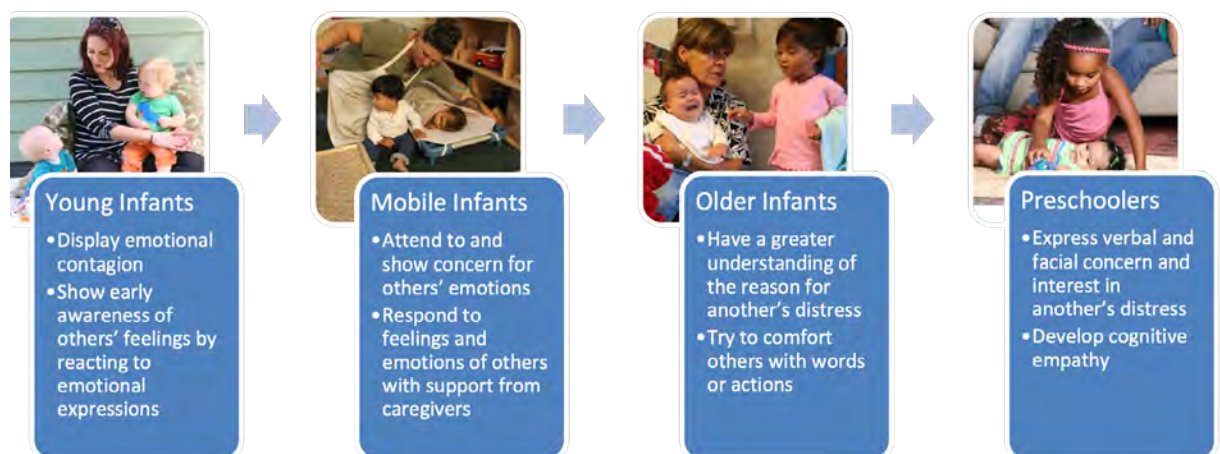
In the preschool years, cognitive empathy takes greater hold (McDonald and Messinger 2011). During this time, children develop theory of mind. They also can fully consider the perspective of another person and more accurately begin to understand their experience, which leads to helping strategies that are more effective. In addition, more developed language skills allow preschoolers to communicate about experiences of empathy and helping. Around age four, children

strive to understand why a person may be distressed and can respond accordingly with concern. For example, a child may ask why another child is crying and ask the teacher to help. They may also infer that a baby is crying because they heard a loud noise. In these examples, the child may ask an adult to intervene, or they may provide support to the peer directly by bringing a comforting object or talking to the peer.

Around age five, children continue to respond to another's distress, but they have a greater repertoire of helping behaviors. When a child scrapes their hands falling down, a nearby peer might go ask the teacher for bandages. When a friend is crying, the child can ask their peer what is wrong and help find a solution to comfort their peer (e.g., reading their favorite book, rebuilding a block tower).

Figure 1 provides an overview of a child's development of empathy.

Figure 1. Overview of Empathy Development



Influences on Empathy Development

Humans are born hardwired with the capacity to develop empathy, but several individual and environmental factors influence how empathy unfolds. Genetics, neural development, and temperament all play a role in the development of empathy (McDonald and Messinger 2011). Empathy is also related to other aspects of a child's social, emotional, cognitive, and language development (McDonald and Messinger 2011; Ornaghi, Conte, and Grazzani 2020). For example, children's emotion understanding, emotion regulation, and social understanding impact their ability to experience empathy (Denham 2007; Grazzani et al. 2016). Children who demonstrate more sad and angry emotions may be less able to see, let alone respond to, the emotional needs of another person (Denham 2007). Similarly, a child's ability to regulate their own emotions allows them to redirect attention from their own distress to that of another person, a prerequisite for empathy (Ornaghi, Conte, and Grazzani 2020).

While there are individual differences in empathy, environmental influences also affect the development of empathy, including socialization, contextual factors, and cultural values. First, all people can develop their empathic capacity. Empathy can grow over time with environments that support children's understanding of their own and others' emotions. Furthermore, everyone, regardless of their empathic competence, encounters situations in which it is easier or harder to experience empathy. As children learn social rules, they may or may not actually experience empathy in all contexts or with all people (Zaki 2014). For example, as children learn the ingroup and outgroup in their communities, they may be more likely to experience empathy with ingroup members than with outgroup members. Likewise, children are more likely to demonstrate empathy and prosocial concern for those with whom they have a familiar relationship. Cultural values also impact how distress, empathy, and prosocial behaviors are expressed and interpreted (Trommsdorff and Cole 2011).

A Note About Early Prosocial Behaviors

While prosocial concern reflects one facet of empathy, not all helping behaviors are driven by empathy. For example, imagine an early childhood teacher cleaning up the block area. An older infant joins them in putting blocks in a basket, but is this infant experiencing the emotions of the teacher or considering their perspective on what it feels like to clean up the classroom? Most likely, no. This "helping" behavior may be because the child enjoys filling baskets with objects, wants to spend time with the teacher, or imitates the teacher, none of which is driven by empathy.

Empathic helping, or behaving prosocially to respond to another's emotional experiences, begins to emerge and grow between eighteen and twenty-four months (Ornaghi et al. 2017). Empathic helping requires the child to feel and think about what it may be like for another person to experience an emotion, such as sadness, pain, or joy. By about 30 months, children can help in emotion-related situations that require more complex inferences about others' needs, feelings, and internal states (Svetlova, Nichols, and Brownell 2010). For example, if a child observes a peer who is shivering

or otherwise visibly cold, they might go find a blanket or jacket to help this child. Similarly, if a sibling is sad to get a shot at the doctor, a child may try to provide individualized comfort (e.g., giving a hug or sharing a favorite snack or toy).

This distinction is important for caregivers to understand because supporting empathy is not synonymous only with promoting prosocial behaviors. Supporting empathy development requires a much broader socialization of young children's emotion understanding, emotion expression, emotion regulation, consideration of others' perspectives, *and* helping behaviors motivated by empathy.

The Caregiver's Role in Promoting Early Empathy

How does this research on the development of empathy translate into practice for caregivers of infants and toddlers? As caregivers, we have the immense responsibility and privilege to honor the emotional experiences of infants and toddlers. This lays the foundation for fostering the innate potential young children have to share in the emotional experiences of others. Use the following strategies to promote empathy development and early helping behaviors. For additional ideas, see the list of examples, "Caregiving Strategies to Support Empathy by Age," at the end of this chapter.

Build Warm, Responsive Relationships with Each Child

Research has shown that the caregiver-child relationship and attachment security relate to empathy development (McDonald and Messinger 2011; Denham 2007). To support the development of attachment security, caregivers can regularly follow the steps of the PITC responsive process to provide care for infants and toddlers sensitively. Consistently noticing infants' cues and responding to

their needs creates the basis for a secure attachment relationship to form. A secure attachment provides the context for emotion understanding, coregulation (e.g., regulatory support provided by caregivers), and perspective taking.

Additionally, caregivers can show warmth and affection to contribute to relationship building by smiling, laughing, and responding empathically to the range of a child's feelings (Dean, LeMoine, and Mayoral 2016). They can ensure that their tone of voice, facial expressions, and enthusiasm match those of the child, and they can similarly engage in synchronous interactions during play (Garner 2006; McDonald and Messinger 2011). Adults who can match a child's displays of emotion (e.g., smiling to share in happiness, furrowing eyebrows to indicate frustration) may have greater sensitivity to the child's emotional cues (Garner 2006). When adults and children match each other's emotions, it provides the opportunity for the infant to feel what the adult feels, and it gives infants the idea that their own emotionally motivated actions may influence another person (McDonald and Messinger 2011).

Create an Emotionally Safe Environment for Children to Express Emotions and Observe the Emotions of Others

Infants and toddlers experience emotions throughout the day. A positive emotional climate provides a space where children's emotions are accessible to them and accepted by their caregivers (Denham 2007). Skilled caregivers sensitively notice the emotional experiences of individual children. They model empathy for children's emotions, which may include soothing young infants, and they acknowledge and validate children's emotions. A caregiver's focus on a child's emotions helps the child learn to identify emotions and allows them to feel free to authentically express the range of emotions they encounter throughout the day. In addition, children need to observe both the emotions of caregivers and peers and the caregivers' authentic reactions to these emotions (Denham 2007; Garner et al. 1997). As appropriate, draw attention to your own emotions and those of children's peers. Share feelings you are experiencing, and model strategies for appropriately expressing and managing your emotions (Dean, LeMoine, and Mayoral 2016).

Use and Support the Development of Emotion-Rich Vocabulary

As caregivers notice infants' emotions, they can provide labels and descriptions for the emotions to help children develop an emotion-rich vocabulary. Caregivers may begin with simple vocabulary, such as *happy*, *sad*, or *mad*. As children develop, caregivers may also vary their language and use richer vocabulary, such as



surprised, *worried*, or *playful*. As children gain more communication skills, engage older infants in conversations to identify and clarify their own emotions. Use language that invites the child to be an active part of determining their emotions (e.g., “Are you feeling . . . ?” “I wonder if you’re feeling . . .”). Likewise, label the emotions that children’s peers are expressing, and help children begin to recognize one another’s perspectives. Describing emotional states and authentically sharing in children’s emotional experiences helps children notice and recognize the emotions that others experience (Dean, LeMoine, and Mayoral 2016; Garner et al. 1997). Adult–child conversations about feelings help children become more capable of empathy with peers (Denham 2007). As they are able, caregivers may provide explanations for the causes and consequences of emotional experiences of the child and others around them. Such opportunities for children to learn about their own emotions and those of others support young children in being able to recognize emotions in others and learn ways to respond empathically.



Read and Discuss Stories About Emotional Experiences

With older infants and toddlers, read stories that focus on feelings and emotional experiences. Engage children in conversations about feelings. Caregivers can draw children's attention to the feelings in a story, inviting children to identify those feelings. Depending on the age of the children, caregivers may describe or ask the children about what may have caused the feelings or how the characters may cope with the feelings (e.g., "Why do you think the fox feels that way?" "What might the little boy do to feel better?" "Tell me about a time when you felt . . ."). As children think and converse about the characters' emotions or their own emotions, they are developing important social and emotional knowledge and skills, such as emotion knowledge, emotion understanding, emotion talk, and prosocial behaviors (Grazzani et al. 2016; Ornaghi et al. 2017). In the chapter by Eva Marie Shivers and Flóra Faragó, they discuss how teacher-led discussions during storybook reading can reduce racial bias by fostering perspective taking and empathy.

Communicate Needs and Ways of Helping

Older infants first engage in instrumental, or goal-directed, helping before empathic helping. As such, explicit communicative support facilitates the blossoming of young children's early prosocial skills (Svetlova, Nichols, and Brownell 2010). Clearly communicating a need to an older infant or toddler, either your own (e.g., "I would like some help wiping the snack table so that I have more time to play with you before you get picked up") or that of another child (e.g., "Sonia looks so sleepy. Can you bring her blanket over so she can go down for her nap?"), helps the child begin to identify the needs of others. Framing these requests through the perspective of another person may also support children in the cognitive aspect of empathy (e.g., "I'm noticing that Teacher Malia is getting frustrated because there are too many plates to carry. Would you like to help her carry some?"). Sharing possible ways in which the child could help a peer offers them concrete ways to engage in prosocial behaviors.

Conclusion

An early focus on empathy in the infant and toddler years is critical because it influences young children's development in other areas and later outcomes. Specifically, empathy is important for social and emotional development because it impacts behaviors toward others, social competence, and the quality of social relationships (McDonald and Messinger 2011). Empathy also relates to a child's engagement in prosocial behaviors. In turn, early prosocial behaviors, such as helping, sharing, and comforting, are correlated with personal well-being, regulation of antisocial impulses, and school achievement (Ornaghi et al. 2017).

To return to this chapter's opening question, can we imagine a more compassionate world, one where children and adults have the capacity and motivation to act out of care and concern for others? Empathy and prosociality are central aspects of compassion (Knafo et al. 2008). This chapter showcased the earliest roots of empathy, and as caregivers of infants and toddlers, we have a pivotal role to play in fostering the development of these essential skills for healthy social and emotional development.

Caregiving Strategies to Promote Empathy by Age

The following strategies were developed based on *The PITC Curriculum: Learning Progressions* (Mangione et al. 2021). Use these strategies and examples to consider how you can support young, mobile, and older infants in their developing understanding of their own and others' emotions and in their emerging abilities to demonstrate prosocial concern for others.

Young Infants (zero to eight months)

- Model empathy and nurture babies' feelings.
"You look sad. Grandma will be here soon. Would you like me to hold you?"
- Talk about infants' feelings during daily routines.
"Pablo is crying. He looks tired. I hope his blankie will help him go down for a nap."
- Highlight infants' emotions as they begin to engage with one another.
"You are squeezing Nakia's arm. She looks scared. Use gentle touches."
"Elijah smiles when you reach for his hand, Jackson. You look happy playing with him."

Mobile Infants (eight to eighteen months)

- Use a variety of words to describe mobile infants' feelings.
"You are stomping your feet. It looks like you are feeling frustrated."
"I hear you babbling. It sounds like you are feeling joyful."
- Help infants notice the feelings of peers and ways to support one another.
"You're right, Cesar; Ria is crying. It looks like she is feeling sad. I wonder if her teddy might help her feel better. Can you get it from her cubby for her?"
"Sam is ready for his bottle. Look at how he smiles when I bring him his bottle."
- Facilitate peer interactions that support empathy development.
"You feel upset when Jamie takes the toy from you when you aren't ready. Let's ask Jamie to wait his turn."

“I see that Zosima is sitting in the corner with her arms crossed. Let’s go check on her to see if she’s feeling okay or if she needs some help.”

Older Infants (eighteen to thirty-six months)

- Continue to expose older infants to a wide range of words to describe their feelings.

“You look excited to see that Jerome returned to school after being sick for the past week.”

“I see that Maia is furrowing her eyebrows. I wonder if she may be feeling disappointed that it’s Wilson’s turn to play with the baby stroller.”
- Invite older infants to share how they are feeling rather than telling them what you think they feel.

“Are you feeling . . . ?”

“I wonder if you might be feeling . . .”
- Help older infants understand how their temperament may affect the feelings and preferences of other children.

“I can tell you are excited to see Mirabella when you run to hug her. Remember that Mirabella sometimes is not ready for such a big hug. Can you ask her if she wants to say hi by waving or hugging?”
- Encourage older infants to look at the faces of one another and listen to voices to begin to understand how someone else is feeling.

“Look at Marco’s face. He looks a little nervous to come into the new sandbox. Marco, can I hold your hand while you move into the sand?”

“Wow, Maiv is so excited to have her mom come visit our class to teach us a song in Hmong. She is smiling and talking so happily.”

- Continue to model empathy and facilitate peer interactions that support empathy development.

“I’m noticing that Alejandra is getting sad because she has been waiting for a tricycle for a long time. Can one of our friends give Alejandra a turn?”

“Ouch, that ball hit Lola in the head. Let’s see how we can help her feel better together.”

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A Developmental Approach to the Socialization, Guidance, and Discipline of Infants and Toddlers

J. Ronald Lally and Peter L. Mangione

The purpose of this chapter is to spell out an approach to the socialization of infants and toddlers that considers a child's changing developmental capacities. Instead of focusing on how to handle a particular behavior—biting, hitting, saying no—this chapter addresses how socialization, guidance, and discipline need to be informed by, and adapted to, the child's developmental capacities at the particular point in the child's development. It explains why similar behaviors in children of different ages need to be treated differently. It also explores issues of context and explains why factors as diverse as adult-to-child ratios, environmental arrangements, and number of transitions in a day can influence the behavior of the children in group care.

The chapter begins by presenting how a child's changing competencies and motives influence the socialization process. It then explains some of the ways an adult's "vision" of a child—beliefs about how children think and what motivates them—can influence how that adult socializes. It then discusses appropriate socialization goals for both individuals and groups and ways to prevent, or at least decrease, behavior that an individual

teacher may find challenging or unacceptable or that may require intervention. It ends with a section on how to plan and conduct individualized interventions with children.

Philosophy and Orientation

PITC takes a developmental approach to socialization, guidance, and discipline. It considers each child's level of development, individual temperament tendencies, home and cultural experiences, and the context in which a behavior or behaviors occur. PITC defines socialization, guidance, and discipline in the following way:

Socialization: The shared rules and expectations for living that infants and toddlers learn through relationships and interactions with others, especially the adults caring for them.

Guidance: Adult caregivers' communication of shared rules and expectations for living through example, demonstration, explanation, and focusing attention.

Discipline: Promoting desired behavior by providing clear limits, giving gentle reminders, and, if behavior is hurtful or harmful, intervening to stop and redirect

it. As part of intervention, the caregiver helps children gain an understanding of the effects of their behavior on other people and things.

These definitions, particularly the definition of discipline, require careful consideration, as they vary across the diverse families and cultural communities served by the early childhood field. Within the PITC philosophy, socialization is grounded in collaboration with families to establish shared rules, expectations, and an understanding of how guidance and discipline are handled, particularly when clear limits and gentle reminders are needed. If a behavior is hurtful or harmful, the focus is on the behavior. The child's emotion related to the behavior is consistently acknowledged and respected. The hurtful or harmful behavior is gently stopped and redirected. Helping children gain an understanding of the effects of their behavior on other people and things is adapted to each child's age and level of development.

As infants grow, they become more competent. This point is obvious. What is not so obvious is how teachers need to adjust their guidance strategies based on those

growing competencies. Research has shown that during their first three years of life, children go through at least three major transitions in development: from the very young baby seeking security, to the exploring six- to eight-month-old, to the fifteen- to eighteen-month-old beginning to seek identity (Brazelton 1998; Brazelton and Sparrow 2006; CDE 2009). These transition points change the way the child functions and, within the PITC philosophy, call forth a different kind of guidance from the adults providing care.

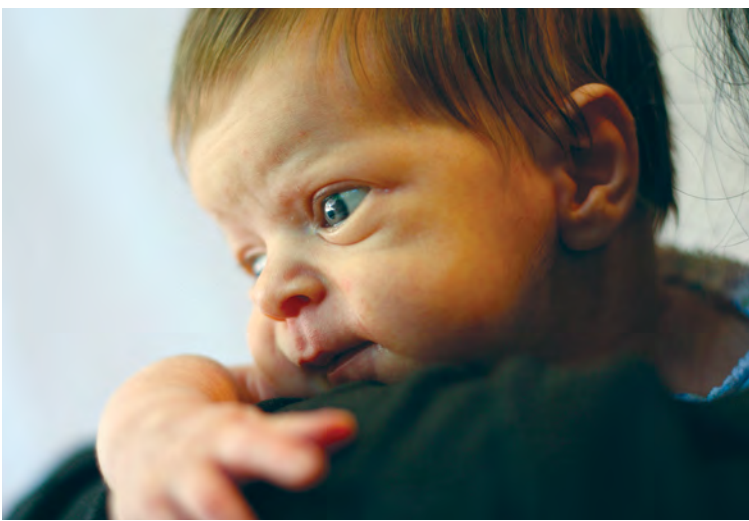
The Young Infant (Up to Eight Months)

Because young infants have little capacity for controlling their urges and because they are mostly dependent on those who care for them, the adult's role in guidance in the early months is mostly to help children feel secure, help them gratify their needs, and keep them safe. When children are doing something that their teacher sees as dangerous to themselves or others, the teacher gently redirects them, moves a hand, or repositions them.

Much of what the youngest babies learn about how to act in the world comes from their experience of how they are treated by their caregivers. Babies observe and learn from the actions of others. Models of kindness and provision of protection and nurturance are powerful teachers.

The Explorer (Six to Eighteen Months)

When children reach the age of six or seven months, both their physical and mental equipment change. These infants become increasingly interested in moving away from the caregiver and exploring. They are changing the way they need caregivers to provide security. They want caregivers to be available and attentive but not doing everything for them. Maybe



these explorers are just starting to crawl or are trying to position arms, legs, and bodies to examine things of interest (Whitmer and Honig 2020). Children of this age start to take over some of the regulation of their bodies, moving toward things they desire and persisting with attempts at more complex movements. They wait a little bit for their bottle or decrease their crying when they see that their caregiver is on the way (Fox and Calkins 2003). They are gaining some control and exhibiting new developmental skills that need to be acknowledged. Although they certainly are not in control of their impulses, they are showing a growing level of control.

How these children should be socialized changes slightly from how the very young infant was socialized. With these children, caregivers can demonstrate how to do things, briefly explain things, and use the children's interest in exploration to focus or refocus their attention (Scaramella and Leve 2004). A child of this age drops a spoon to see where it goes, or turns on the TV 15 times in a row to cause the colors and sounds to come on. The child is exploring and learning. Because they are motivated by discovery, showing them how to do something, giving a brief explanation, and focusing attention work well at this age, as does providing them with space to explore.

The Individual (Fifteen to Thirty-Six Months)

At around fifteen to eighteen months of age, children reach another transition point. At this age children begin to show the emergence of an understanding of the concepts of *me* and *mine*. They exhibit a forceful standing on their own two feet and also an understanding of the power of choice. This period in life is when children are learning how to



consider their needs and wants in relation to the needs and wants of others. These children can move fast. They understand a lot of words, and they know how to do many things (Whitmer and Honig 2020). And because they are gaining these skills, society expects more of them (Fox and Calkins 2003). For example, they are expected to share and to be quiet in church or public gatherings. They may react to these limitations on their freedom by saying no. Their resistance is part of this new period of development. Through resistance they explore a new understanding of self and other—both a liberating and scary discovery. Clearly they are different in both capability and motive from the younger explorer.

With regard to providing guidance to children of this age, the caregiver's behavior should change as children change. These children have greater physical, social, language, and intellectual capabilities. They can make conscious choices. They use strategies to get their way. They can feel shame and pride (Lewis, Alessandri, and Sullivan 1992). Therefore, caregivers need to take these new skills and motives into consideration as they provide guidance.



At this point in development, guidance techniques should expand to include culturally consistent rules for behavior (Denham 1998), with clearly defined limits and simple communication about the

reasons for rules. In addition to continuing the socialization and guidance techniques already discussed for use with the younger infant, caregivers can now add some simple rules for behavior that may require discipline—for example, no physical aggression toward other living things and no destruction of property. Why? Because children now have the developmental sophistication to begin to understand rules. In cases in which a rule to prevent hurtful or harmful behavior is not followed, gentle intervention to stop the behavior is necessary, along with clear communication of the rule and the reason for it. See the box titled “Tips for Guiding Older Infants” for some guidance and discipline suggestions when caring for older infants

Tips for Guiding Older Infants

Have a Long-Range Goal in Mind

Optimize the development of feelings of personal security, confidence, initiative, and usefulness in children while simultaneously encouraging a sense of self-regulation, a deep connection with fellow humans and other living things, and a reverence for the world in which we live.

Understand the Role of Arbiter of Culturally Appropriate Behavior

It is important to understand that children naturally look to caregivers as the guide of culturally appropriate behavior. *Accept this role.* It is part of the human experience. You are setting the child on a path of interaction with others.

Create an Orderly Climate

Make sure that socialization lessons and the experience of being an individual take place in an orderly environment. The rules for behavior need to be clear and fair and consistently applied in specific and reasoned ways.

Make Evident the Contributions of Each Child to the Group

Part of learning appropriate boundaries to one’s actions in a group is becoming aware of one’s value to the larger group. An adult’s pointing out and appreciating a child’s inclination to contribute and be useful to the group is essential.

Be Specific

Point out those specific parts of a child’s behavior that are the ones that the child needs to regulate. Be clear enough in your message that the child does not generalize to other aspects of the behavior that do not need to be regulated.

Do Not Give Up

It may take months of help for a child to demonstrate a socially appropriate behavior consistently. Look for little steps of progress along the way and point them out to the child when you see them. Additionally, careful design of the environment, identification of children's feelings, and extra supervision of emotionally charged interactions can help the child along the way.

Making the Shift

The ability of teachers to shift the way they socialize based on the child's point in development is a key to effective guidance. Learning only one way to handle biting, hitting, or any other behavior does not work. It does not make sense to speak of "feeding problems," "sleep problems," or "negative behavior" as if they were distinct categories. Rather, teachers need to search for the meaning of behaviors related to, for example, feeding or sleeping by considering the child's current developmental phase, temperament tendencies, and culturally based socialization experiences.

Teachers need to learn to shift their guidance techniques as the child develops. It is important not to hold young infants to expectations they cannot understand or assign to them motives for behavior that they are not developed enough to hold. For the older child, the practice would be to help them with learning societal rules. Dr. Selma Fraiberg, a pioneer in the field of infant mental health and author of *The Magic Years*, put it this way:

We can see that a method that is indicated for one stage of development may be completely unsuited for another stage of development. For example, the principle underlying our care of the infant in the first few months is one of total gratification of need. But if we apply

this principle to the rearing of the two-year old or the still older child we would be rearing an extremely dependent, ill-mannered child. The difference clearly is the equipment of the infant and equipment of the older child. (1959, 75)

Parents and teachers need to guard against inappropriate reading of motive while socializing a child. If adults treat an eleven-month-old infant as if the child had the developmental skills and motives of an older toddler, they might try to discipline a child who is incapable of understanding the reason for the adult's expectation. If teachers conclude that



the act of turning the light on and off 10 times is a direct act of resistance, they will interpret and respond to the child's behavior based on motives that the child is not yet capable of having. But, on the other hand, if teachers do not set limits for a twenty-four-month-old because they still understand the child as having the developmental sophistication of a twelve-month-old, they would miss an opportunity to provide developmentally appropriate and needed guidance.

Addressing a Period of Transition with Understanding

Children's behavior during transition periods often reflects the disruption the child experiences related to the transition. As children transition from one way of organizing their experiences in the world to another (from security to exploration to identity), they often display inconsistent behavior. This can be confusing to a teacher. T. Berry Brazelton, in his Touchpoints work (1998), points out that during transitions the teacher needs to be especially sensitive to changes in the child's cues; the transition can be upsetting to both the child and the teacher because what used to work to settle things down does not work anymore.

Dr. Fraiberg speaks of it this way:

A very large number of the problems that appear in infancy and childhood appear at the juncture points of new developmental phases. Each of the major phases of development in infancy brings forth new problems for the child and for his parents. The emergence of a strong love bond between the baby and his mother produces a period of anxiety at separation in the child.

The onset of independent locomotion, the striving for the upright posture, produces its own anxieties and typical behavior problems whenever body activity is interfered with. Body independence in the second year and the emerging sense of an independent self bring forth a period of negativism. The cultural demands of weaning and toilet training in the second year create their own problems for the pleasure-loving child who is now expected more and more to meet externally imposed demands. (1959, 75–76)

Teachers need to plan socialization, guidance, and discipline techniques from a developmental perspective. Becoming aware of each child's current capacities helps teachers to make correct choices about how to respond to the child and provide guidance. Knowledge of children's major developmental transitions, the impact of those transitions on behavior, and the growth in developmental equipment guides teachers to make choices that are responsive and effective.

Setting Socialization Goals

With their early socialization grounded in family and culture, many adults automatically guide and socialize children in the same way that they were socialized. The PITC recommends that teachers carefully consider the outcomes of their efforts to socialize children. How are children expected to function when they exit the program? What are the socialization goals? The PITC has adopted a specific goal for the behavior of children who exit PITC-based programs: a compassionate sense of wonder. It is described in the box titled "A Goal for Socialization and Guidance."

Whether teachers use this goal or choose another for the focus of socialization activities, they should spend time thinking about and clarifying their goals because goals shape a teacher's reaction to children's behavior. Teachers must also be sure to include the parents of the children served in the decisions made about socialization. One area to consider as part of that planning is the area of independence. There has been a great deal of confusion and cultural disagreements about how a child should be socialized in relation to independence. This concept cannot be ignored.

The PITC postulates that a healthy sense of self includes three components of how children relate to others:

- **Dependence:** In some situations, children are dependent on others. They understand that they can rely on the help of others and that there are others who are more powerful than they are who can solve problems for them and provide protection and nurturance as well as guidance and instruction.
- **Independence:** In other situations, children see themselves as independent. As children become aware of the distinction between *me* and *not me*, they need to find a culturally meaningful voice to express their choices, creations, emotions, and beliefs.
- **Interdependence:** In other situations, children need to understand that they are interdependent with other living things, seeing one's self as connected to other living things. Complete definitions of self always include an understanding of self in relation to others and seeing oneself as part

of a cultural group. Children have to learn to consider not only their individual needs, wants, and desires, but also the impact of their individual needs, wants, and desires on others' needs, wants, and desires. They also have to consider how their individual needs, wants, and desires fit with the goals of their cultural group.

- In the development of self, one does not necessarily want to see the socialization goal as an evolution from the almost total dependence of very early infancy to a state of independence but rather as an evolving ability to exhibit dependence, independence, and interdependence in culturally appropriate ways (Suizzo et al. 2008). The PITC does not see movement toward independence as the necessary and ultimate outcome of development. Rather, it sees children gradually understanding that they have a repertoire of behaviors on the dependent/independent/interdependent continuum, each of which is appropriate in the creation of a healthy self.



Dependence, independence, and interdependence are a part of the developing self from the beginning to the end of life and are flexibly expressed in mentally healthy individuals. As Jeree Pawl states, “It is that positive internalization of mutually respectful and contingent relationships

that make this flexibility possible” (pers. comm.). Rather than value one component of self over another, the PITC seeks to help children learn the appropriateness of the full range of possible ways to define and express a developing identity.

A Goal for Socialization and Guidance

Within the PITC, the goal for the socialization and guidance of children under age five is a concept that seeks to encompass both the needs and rights of the individual child and the needs and rights of all other living things. This socialization goal is called “a compassionate sense of wonder.” This goal was selected because it is often seen that when people socialize children to be a particular way—curious, independent, empathic, obedient, altruistic, and so on—they get more than they have bargained for. They want children, for example, to be independent but not so independent that they never rely on another for help or never see themselves as part of an interdependent community. Similarly, they want children to be curious but do not want them to think that it is fine to take an expensive watch apart in order to see what makes it tick. Living a life with a compassionate sense of wonder is a way of living that is curious but not destructive, thoughtful but not manipulative, confident but not overbearing, powerful and considerate, creative, responsible, and generous to both self and others.

The PITC recommends that the socialization goals of a program should be framed in a context of “self in relation to others” rather than just focusing on a unidirectional goal such as curiosity or empathy. Behavioral goals should have the following four attributes:

- confidence in self,
- intellectual curiosity and interest,
- a sense of deep connection with fellow humans and other living things, and
- a reverence for the planet.

Supporting the development of these attributes depends on what teachers believe about the capacities, needs, and motives of children. Teachers’ beliefs influence the way they will treat children. Therefore, it is important for teachers to be aware of their beliefs about what drives children to action and how children should be treated. Teachers’ beliefs about who children are, how they are made up, what motivates them, and how they function dictate the way they will interpret children’s behavior and react to it. If teachers believe children are a certain way, then teachers will feel that to be a responsible adult they must treat children in a way that is consistent with the children’s nature.



Theories About the Nature of Children and Socialization

Every person has a theory or theories about the nature of children and acts from those theories whether they are aware of them or not. The box titled “Metatheories of Child-Rearing That Reflect Historical Dominant European American Perspectives” presents some commonly held visions (metatheories) of children that have influenced ways of envisioning children in the dominant culture of the United States. In one way or another, these metatheories have influenced child-rearing practices in the United States. The descriptions of the

metatheories in the box present how they were originally put forth. Today, these strongly stated positions have often been watered down and mixed with other ideas about young children. It is helpful to read the metatheories in their original form and think about how they might, in some way, influence current thinking about child-rearing.

Teachers can benefit from learning about the dominant theories and comparing them with what they know and believe from their own cultural experience and what is known from research (metatheory VII). Sometimes in their education teachers are influenced by one or more of the theories that follow. Through self-reflection, teachers from diverse cultural backgrounds can become aware of their own culturally based vision of how children function, how they develop, and what guidance to provide. Teachers can also become aware of influences from their education and the culture of early care and education. Teachers’ own vision may be similar to one or more of the metatheories or differ from all of them. What is important is for teachers to become aware of their own theory or theories and to be intentional about guiding socialization in a way that is responsive to each individual child and responsive to the socialization goals of each child’s family and culture(s).

Metatheories of Child-Rearing That Reflect Historical Dominant European American Perspectives

I. Natural Unfolding

This metatheory* comes from the early writings of Jean-Jacques Rousseau and influenced, to varying degrees, Pestalozzi, Dewey, and Neil. It views children as basically good souls that need to be protected from the damaging messages of society. The child is viewed as a blossoming flower—on a trajectory for healthy growth since birth. According to this metatheory, a child's development can be damaged by too much interference from the outside. The natural urges of the child do not have to be controlled or shaped, nor does the child need to be trained to live in harmony with others. It is the job of the adult to get out of the way of the natural growth process and allow for the child's unfolding, not to try to shape the child's behavior to meet societal standards. This "nature approach" to education was quite popular in the United States in the late 1960s and early 1970s and inspired pedagogical methods worldwide.

II. Tabula Rasa/Blank Slate/Empty Vessel

The blank slate is another metatheory adhered to by many. The child is seen as coming into the world without predisposed inclinations. Starting with Aristotle and continuing with the writings of John Locke, this metatheory became popular in modern America through the writings of J. B. Watson, the father of American psychology, and in the late 1960s through the work of B. F. Skinner and the behaviorist school. Many policymakers and politicians concerned with seeing that children obtain basic academic skills hold to this notion.

From this point of view, the way a child turns out is completely based on the experiences the child has in the environment in which they are raised and by information provided by others. All things, including child motivation, are produced, shaped, and molded by those in control of the experiences to which the child is exposed. Under this belief system, those raising a child shoulder immense responsibility for how intelligent the child will become, how the child will express themselves, and how the child will act in relation to others. Little credence is given to the concepts of temperamental differences, inborn intelligence, or biological predisposition. Motivation to learn is often seen as the responsibility of the adult and not innate to the child. Because how a child turns out is to the blame or praise of those who raise the child, it is the adult's role to "write" on the "blank slate" or "fill" the "empty" child early and often with good and useful things and as much of the right content as possible.

III. Good and Selfless Vs. Bad and Selfish

Some people bring from their cultural experience a view of the child as a being who is constantly dealing with competing messages: to do good or selfless things or to do bad or selfish things. Adults with this metatheory want to help the child to be vigilant and choose to live a good and productive life. A key role in child-rearing, then, is to keep the child from making the wrong choices. Adults work to remind the child that they will be tempted to do bad things. These adults may see their job as reinforcing messages to do good and reminding the child to resist messages to do bad things.

IV. Unsocialized

This metatheory promotes the belief that unless impulses are strongly inhibited and controlled from birth, the child will continue into adulthood as an unsocialized and uncivilized being. Early urges, if not checked, will create an adult who is unethical and is greedy—someone who seeks only personal pleasure and gain. Thus, it is the duty of the responsible adult to control the child's willfulness and to stifle urges to act out with stern, powerful, and consistent discipline. This way of viewing the child leads adults to practices that are aimed at nipping expected bad behavior in the bud. Techniques often used by those who adhere to this metatheory include feeding on schedule, letting a child cry things out, not “spoiling,” and conveying clear messages of adult control. Child-rearing is seen as a struggle for power between child and adult right from the beginning of life. Therefore, adult control of child behavior should start as early as possible so that self-will can be controlled and the child can be kept from a destructive developmental trajectory.

V. Early Unformed

Some people look at infants and do not see anything but a being characterized by bodily functions such as eating and sleeping. They see little or no intellectual activity in the child, no awareness of feelings, and little need for social contact. They believe that the child is not capable of conscious activity until they have grown out of the infancy period. Statements about child-rearing from this point of view follow this pattern: “Why would anyone talk to infants, interact with them, consider their feelings—they can't understand you.” The adult who believes that the infant or young child has few feelings and does not register much about what is going on may do most anything in the child's presence or may leave the child alone for long periods. Loud televisions within earshot or isolation in a crib or playpen are seen as having no effect on the child because the child registers little. Pretty much anything can happen (or not) without permanent consequence to the very young child.

VI. Innocent

In many cultures, children are seen as innocent and unmotivated by inappropriate thoughts and feelings until they reach their fifth, sixth, or seventh birthday. This metatheory postulates that until reaching this “age of reason,” the child should not be held responsible for right or wrong actions. Before reaching the age of reason, the child is seen as not having the developmental equipment to operate with ulterior motives. Adults who view the young child as an innocent often give the child free rein to explore, to choose how and with what to play, and to “be a child.” Once the child reaches the age of reason, however, things change dramatically. Adults' expectations for responsible behavior shift suddenly, and so do discipline techniques and education practices. At this transition point, children are held accountable, and school becomes a much more serious business.

VII. Competent/Vulnerable Child

This metatheory, based on recent analyses of research on child growth and development, paints the young child as simultaneously wearing two hats—one that displays the child's vulnerability and one that shows the child's competence. This view sees

the child coming into the world with a personal learning agenda and having a brain that is genetically wired to seek meaning and learn language. The child is seen as biologically programmed to attach to, socialize with, and learn from the adults who care for them. This view sees the child as a curious and motivated learner trying to make sense of the world they are entering.

Although the child has skills, motivation, and curiosity genetically built in, the child is also desperately dependent upon adults for nurturance, support, and security (Committee on Integrating the Science of Early Childhood Development 2000). Without this adult support, the child will flounder. This metatheory, the one currently most supported by research, defines the responsible adult role as one of providing nurturance and support for the vulnerable component of the child's makeup while at the same time facilitating and respecting the child's skills and competencies. The adult who raises children according to this metatheory acknowledges the child's biological predispositions to both vulnerability and competence and assumes responsibility for providing physical and emotional security while following the child's lead as the child acts out their social, intellectual, and language-learning agenda.

*A metatheory is a theory about a set of similar theories. It provides a conceptual framework for understanding theories with common principles. For example, the metatheory of the natural unfolding encompasses the theories of Rousseau, Pestalozzi, Dewey, and Neil, among others.

As this section has made clear, guidance encompasses a developmental perspective, appropriate goals for the child, and a better understanding of personal beliefs that may influence judgments and actions. This background leads to the next topic: prevention. Benjamin Franklin's old proverb "an ounce of prevention is worth a pound of cure" is fitting for the area of socialization, guidance, and discipline. Much of the work in this area should be about how to minimize the frequency of behaviors that require caregiver intervention. Making sure that caregivers are not creating conditions that result in behavior requiring intervention should be seen as a key component of the work.

Reducing the Need for Intervention— The Environment

Setting up a child care program in certain ways makes it easy for children to follow routines and rules and to interact with

staff and each other and makes the day easier for everyone. Environmental arrangement, selection and distribution of materials, caregiving routines, staff and child assignments, and program policies are just a few of a program's influences on behavior. The box titled "Environmental Factors That Decrease the Need for Behavioral Interventions" provides a list of conditions that affect social-emotional growth and socialization. Most of the conditions listed are consistent with the developmental needs of children who are three years old or younger. Careful study of this list may reveal things that can be changed in the environment and reduce the need for intervening and providing explicit behavioral guidance

With regard to the setup of the environment, things should be arranged so that children can easily figure out where certain types of activities usually happen and where certain types of materials can

usually be found. Dividing the environment into large-muscle, small-muscle, sense-perception, and creative-expression areas lets children know where certain things usually happen. The result is fewer interruptions of one kind of play with another and an easier flow of movement from one activity to another.

Some areas of the environment can cause problems. Narrow pathways can be potential bottlenecks where children might have to negotiate ways to get past each other. The lighting and noise level, the number of objects on display, and the

types of displays on the walls should be considered. Is the environment overstimulating to infants and toddlers? Calming the environment can help to calm the children. The heaters, windows, and floors need to be checked. Is the air fresh and invigorating or stuffy and filled with dust? These things can influence whether or not a child is grumpy by the end of the day. Are there too many toys out or too few? Having enough toys, but not too many, helps keep children engaged and prevents conflicts over a treasured item.

Environmental Factors That Decrease the Need for Behavioral Interventions

- Small group size
- A child-to-teacher ratio of 3:1 or 4:1
- Ample space that is divided into smaller areas that are well organized and free of clutter
- An appropriate amount of materials and equipment
- Child-sized materials and equipment that offer developmentally appropriate challenges
- A quiet, calm environment
- A schedule that provides children with ample time to play, explore, and make choices throughout the day
- A small, easily manageable number of transitions or a limited amount of change (e.g., caregivers, groups, environments)
- Routines and schedule that are handled flexibly
- Order or predictability
- Developmentally appropriate expectations for self-control in an environment that does not have materials that cannot be touched or too many areas that are off-limits
- Little or no waiting time
- Freedom of movement throughout the day; the choice not to sit still during an adult-directed activity

Program Policies

Prevention of behavior issues begins with an analysis of program policies. Research has shown that if the program is structured so that children are in small groups rather than large groups, there is less need for managing children's behavior (Helburn 1995). Caregivers get to know the children, and children get to know the caregivers and each other. Small group size allows the child to form relationships more easily and feel more at ease in a group (Ruprecht, Elicker, and Choi 2016). It also allows greater access to the adult when the child is in need of help with emotional and behavioral regulation. A child-to-adult ratio of 3:1 or 4:1 also helps decrease the need for intervening in children's behavior. Teachers are more available to each child and are more able to get to know the child well and to understand their unique needs and

coping capacities (Vandell 1996; Ahnert, Pinquart, and Lamb 2006).

Another policy that helps with behavior issues is the assignment of each child to a primary caregiver for an extended period of time. This arrangement allows the deepening of relationships through which teachers can get to know just how to relate to a child, the children know how to relate to their teacher, and the teacher and the child's family can work together.

Sensitive and Responsive Caregiving

There is also a great deal a teacher can do to reduce the need for behavioral interventions by adapting their caregiving style to the needs of infants and toddlers and understanding the cultural and contextual influences on the children's behaviors. Below are some ways of acting that can either prevent or moderate behavior a teacher views as challenging.

The young infant:

- Establish a positive, intimate relationship with each child.
- Spend some special one-on-one time with each child every day.
- Give consistent messages of unconditional caring.

The explorer:

Continue what was done with the young infant and:

- Remain nearby and attentive.
- Model appropriate behavior.
- Use redirection to stop unacceptable behavior, offering concrete alternatives.
- Recognize the child's feelings with language.



- Appreciate and encourage prosocial behavior.
- Give children words to express emotions.
- Be consistent, yet flexible, according to the child's age and temperament.

The older infant:

Continue what was done with the explorer and:

- Provide clear, simple, consistent, predictable rules and consequences.
- Share concerns firmly about hurtful and other inappropriate behaviors.
- Offer reasonable choices, when choice is appropriate, and respect preferences.
- Help children make connections between behaviors and consequences.
- Focus on the inappropriate part of the behavior and keep it separate from the appropriate aspects of the behavior.
- Make clear that it is the behavior, not the child, that is unacceptable.
- Point out empathy and caring.

Older children can also benefit from the establishment of a simple set of rules for behavior that are consistently enforced—what Magda Gerber calls “house rules.” The creation of these rules is simple. How to carry them out is the tricky part. All staff members and families should have a conversation about rules or expectations for children's behaviors in the group and how adults in the setting will respond to children who engage in unacceptable behaviors.

Individualized Interventions

The goals are set. The philosophy of guidance is sufficiently clear. The environments are set up, policies and practices have been evaluated, and house rules have been established for the older children. Even with these pieces in place, from time to time one child or another may need additional support for any number of reasons. For example, a child may be experiencing a major change at home, such as the birth of a sibling, or something traumatic may have happened at home or in the community. The final piece of supporting socialization is addressing specific behaviors that become an issue in the group care context. For those situations, the child care team has to plan individual interventions, sometimes having to take unique actions. Here are some things to consider for an intervention.

Collaborate with the Family

It is essential to partner with the child's family before starting an individualized intervention. The child's behavior is communicating a need or an issue that the family might help the teachers better understand. Conversation with the family will shed light on what the child is



currently experiencing. Often, what the family shares about the child's behavior at home can provide valuable information. The family's input may lead to sharing information about their child's behavior and developing strategies together for understanding and supporting their child. Through open communication with the family, effective strategies may be discovered that can be used both at home and in the program.

The relationship with the family starts at enrollment. Once the family is enrolled, the child care team should have frequent meetings with family members to build a supportive relationship and strengthen open communication, collaboration, and mutual learning. Whenever the child care team has decided it needs to take steps to better understand a child's behavior and plan an individualized intervention, collaborating with the family always comes before anything else. The plan that is jointly developed with the family may include some or all of the following steps.

Plan an Individualized Intervention

1. Assign someone, usually the primary caregiver, to shadow the child for a week or two.

For an intervention to be successful, the program needs to do two things simultaneously: provide emotional support and investigate the situation fully. Teachers decide together as a team which team member has the closest relationship with the child. That teacher shadows the child, spending more time close to them to note the particulars of the situation, the provocations, the times of day when the child is most likely to engage in the behavior of concern, the people the child is with, and the activities or areas of the room in which this behavior usually

occurs. Observations should be documented so the program staff can refer to them when communicating with families or when planning for individual children.

2. Stay close to a child who loses control.

If a child starts to lose control of their behavior, the teacher who is shadowing needs to come close to them to show that help is available. Sometimes the child may have to be physically removed from the situation to keep them from hurting themselves or someone else. While holding the child, the staff member should convey the message—both verbally and physically—that the child will be safe and that sufficient external regulation will be provided.

3. Provide the child with opportunities to practice self-regulation.

After an incident has occurred, teachers need to give the child a chance to experience success in self-regulation. They can stack the deck for success by setting up an experience similar to the one that prompted the incident. Teachers may try a time of day when the child usually



has more energy or may invite the child to join an activity in an area of the room where the child enjoys playing and feels comfortable. The child can then engage in the experience with help. Depending on the situation and the child, teachers can provide support and scaffolds—such as using language to help the child recognize and evaluate their emotional responses—and provide feedback and interpretations (e.g., “He’s just coming over to get a truck; he isn’t going to take your car”).

4. Maintain predictability.

Predictability is both social (e.g., “People I know will be there for me”) and spatial (e.g., “I know where to find the puzzles and where I can ride the tricycle”).

Predictability prevents both chaos and rigidity. For toddlers, predictability involves rituals and rhythms throughout the day that follow sequences (e.g., nap, snack, play, then mommy comes) rather than the clock. Teachers may create a spatial structure for the environment rather than a time structure for daily activities. Consistency in rules, routines, and relationships is also helpful.

5. Prepare the child for transitions.

Children who exhibit behavior problems often find transitions to be particularly challenging. For these children, it is important to make them aware of transitions before they happen. For example, teachers can prepare the child by telling them, “We will be finishing lunch in few minutes, and I will come over and help you move your plate and utensils to the sink.” Sometimes teachers can make an agreement with individual children to privately let them know ahead of time when a transition is about to take place.



6. Overstate social signals (facial expression, vocal tone, gestures, affect) and support understanding of requests by breaking them into discrete parts.

Sometimes children who engage in behavior that is challenging in the group care context do not understand the messages that the other children understand. Teachers will know that a child does not understand if they have to repeat themselves several times and are still unsure if the child comprehends the message. Often this child (and the child who has trouble with transitions) is so absorbed in the here and now that they miss subtle cues around them and general messages to the group. Teachers should try to be very obvious with gestures, facial expressions, and tone of voice. They should dramatize each message. Sometimes a teacher can bend down and look directly into the eyes of a child to make sure the child understands the message. But no technique works for everyone, and this level of closeness could overwhelm a child whose temperament or family history makes eye-to-eye contact uncomfortable. As with all tips, teachers need to discover what works for each child.



7. Provide supportive physical and psychological structure.

Sometimes children act aggressively when they read situations differently from everyone else. They may come to a situation anxious, angry, or afraid. Children who are hitting, biting, or pushing may not always think they are the aggressor or the transgressor in a situation. With children, it is important to create situations for them that reduce their anxiety, anger, or fear. A teacher's presence can be an emotional resource. A teacher might facilitate play between two children by sitting with a child who exhibits hurtful or harmful behavior toward another child. Another time, a teacher may be able to keep a situation from escalating by reminding the child about the house rules.

1. Attend closely to a child's verbal and nonverbal cues.

With children under three years of age, many of the cues they give are nonverbal. Some teachers have an uncanny ability to intervene in a situation just before it explodes. If those teachers are observed, it is often clear that they pick up nonverbal cues that indicate what a child will do. As teachers shadow a child, they will listen to

and watch them more closely than usual and become more skilled at knowing when and how to intervene before a provocative event unfolds.

2. Provide verbal feedback to the child with references to feelings and behaviors.

Sometimes children need help with finding an outlet for their emotions. Teachers' words can provide a scaffold for the child to move from actions to words. "Wow, it looks like you're really happy." "Are you frustrated? I can't tell." "Keesha, are you getting tired, or are you sad?" It is better to check on the child's feelings with a question than to tell a child what she is feeling. A teacher may be wrong; by asking the child to reflect, the teacher can help them learn how to label their feelings.

3. Provide numerous ways for the child to express affect (e.g., symbolic and motor play, listening to and acting out relevant stories).

Fantasy play, water play, making up stories, and inviting the child to respond to stories can all be helpful in having the child express emotions that might be hidden. Teachers can learn a lot about young children in the fantasy corner. This type of play is often a release for a child who exhibits fear, anger, and repeated difficulty with self-regulation.

4. Talk with other program staff at the end of the day—and with the child's family on a regular basis—about what is working and not working with the child.

Individual interventions require time for planning and replanning. This type of work can be exhausting to a teacher. Program directors should provide

debriefing time and—on occasion—substitute caregivers to be with the children while the teachers meet. The teachers who are not shadowing may feel that they have to take care of the rest of the group. Additionally, a teacher who is shadowing may feel frustrated, thinking they are not making any progress. When teachers think that they are spinning their wheels, it is wise to bring in a mental health consultant to facilitate the work of the team. Having an ongoing relationship with an early childhood mental health specialist can be immensely helpful. A professional of this type can assist teachers in reflecting on their practices, give them fresh eyes from which to view the child's behavior, and offer intervention strategies.

Conclusion

Infants depend on adults for many things. One of the most important is guidance in how to pursue needs, interests, and desires while considering the needs, interests, and desires of others. Children learn about these things in the early months of their lives, through interaction with and observation of their caregivers. As they grow older, young children look more closely at those who care for them to see how to behave. They wonder about questions such as, “When and how can I assert myself?” “When do my actions interfere with the actions of others or result in the destruction of property?” “What emotions can I express, and how loudly can I express them?” Children gradually learn answers to these and hundreds of other questions through day-to-day interaction with those who care for them. As they move out of the infancy period, they slowly incorporate what they have seen and learned into how they relate to others.

But how do teachers know what to do and what to say to the many different children who are entrusted to their care? The answer is: *it depends*. And it depends on many things. As this chapter has shown, the ways in which teachers interact with children depends on teachers' beliefs about babies and young children. What teachers believe about children's capacities, drives, needs, and motives stems from their training in early childhood care and education and their own cultural experiences. These beliefs influence the goals teachers set for children and the ways in which children will be treated. Each child's developmental “equipment” also influences the interaction between teacher and child. As a child develops, teachers need to treat similar behaviors differently. An interaction depends on the program's environments, policies, and practices. And finally, when a child presents behaviors that are challenging in the group care context, the teacher's approach depends on their skill



at investigating together with the family what is really happening for that child, their ability to understand the meaning of the child's behavior and to individualize a strategy to help, and the relationship that has been or will be built with the child.

Appropriate socialization, guidance, and discipline for children under age three is not simply knowing how to work with issues such as biting, hitting, or screaming, but rather how to understand and support individual children. Program staff members can help children by observing and understanding each child's behavior and by using that knowledge to support each child's future development.

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Self-esteem, Security, and Social Competence: Ten Caregiving Gifts

Jerree H. Pawl

Caregivers take on a big responsibility when they care for very young children for long periods of time outside the children's homes. The caregiver is expected to be a competent and affectionate extension of the child's parents or guardians.⁶ The child learns to turn to the caregiver to meet their basic emotional needs. The caregiver has great influence over the picture the child begins to form of the world around them—that is, the child's impression of how they will be treated and how they should act around others. In instances in which the infant's or toddler's relationship with their own parent is under stress, the caregiver's contribution to that child's sense of self and of the world is beyond measure.

Ten Caregiving Gifts

This chapter presents ten suggestions for care that are some of the most powerful ways a caregiver can support infants, toddlers, and their parents. They are called *caregiving gifts* because of the great benefits they provide infants and toddlers in gaining self-esteem, security, and social competence.

Gift One: Respond to Very Young Infants in Ways That Encourage Them to Feel They Can Make Things Happen

The first gift the caregiver can give an infant is to respond in a way that encourages the infant to feel they have an impact on the world—that they can make something happen. Adults often are miserable at those times when they feel least competent, least effective, and most helpless. Babies are dependent in many ways—they are immobile and cannot fend for themselves—but they can let the caregiver know that they have a need. When the baby's communication of need brings a prompt and caring response, preferably from someone familiar, the response gives the baby the experience of having an effect, a sense of power.

The caregiver needs to respond when the need is expressed, not when the time is convenient or better fits the caregiver's schedule. One can imagine how good babies feel when the giants come running. Small and helpless as babies are, they can command and control what they need.

Early infancy is not the time when adults need to teach children the limits of their ability to cause things to happen. It is just

⁶ "Parents or guardians" is used to broadly include primary caregivers at home, such as parents, grandparents, other relatives, foster and adoptive parents, and so on.

the opposite. By helping the young infant gain a sense of being able to cause things to happen, the caregiver creates a feeling of power in the infant and an emerging confidence in the child's sense of self. Thus, when a baby expresses a need for food, the caregiver feeds the baby but does more than satisfy the baby's hunger.

The caregiver gives themselves as a responder. The baby begins to trust that the caregiver is there for the baby, to expect the caregiver to be there, and to experience the pleasure in being able to get the caregiver to respond to the baby's needs.

Gift Two: Help Young Infants Learn They Have Ways to Take Care of Their Own Needs

The pleasure a child experiences in getting the caregiver to respond to their needs leads to the next caregiver's gift. If the caregiver always does things for a baby, the child will not have a chance to learn about their own competence. Therefore, caregivers can also help babies and toddlers learn that they have power to take care of themselves in some ways.

When a baby is mildly distressed—dry, not hungry, but “fussy”—the caregiver can speak to the baby (can the baby use sounds to comfort themselves?), pat the baby briefly (can the baby pat themselves?), and sometimes reposition the child. Perhaps with this cooperation the baby will find out that with the knees up they feel more content or that while on the tummy the baby can find their own thumb. Next time the baby might move to that position without help. The baby learns that they can rely on things directly under their control. Again, the baby feels effective and competent.

This cooperation between the caregiver (as an alert and sensitive extension of

the baby) and the baby (who can manage some things without help) underlies the growing sense of competence that is so necessary to the child's development of self-esteem. Many day-to-day experiences contribute to that complex sense, but it surely begins with caregivers both responding to babies' needs and providing babies with opportunities to experience being able to take care of themselves.

The process only works, of course, if the child's ability to care for themselves is within the child's capacity. Otherwise, the child is overwhelmed, disorganized, and helpless. Here, the art of caregiving comes in: “When do I help? How much should I help? When should I let the infant do



things on her own?” Occasionally, no matter what the caregiver does, a baby will experience helplessness and frustration. But if caregivers meet babies where they need help and let babies do what they can, the babies will experience an overall sense of control and confidence as a result.

One obvious way to promote a sense of competence is to offer choices to the toddler. That does not mean continually turning difficult decisions over to the child: “Do you want to look at a book, play on the slide, play with a puzzle, paint, or rest?” Promoting competence does mean listening to and granting the child their preference: “I want to go outside.” As the young child increasingly shows the interest and ability to make choices, promoting a sense of competence means increasing the opportunities for choice.

The caregiver may provide opportunities by setting up the home or center so that a variety of play choices is available. When a child can move from one activity to another, depending on their mood and interest, the child will have a continuing sense of control over themselves, the environment, and the expression of themselves in the environment.

Gift Three: Help Infants and Toddlers Develop Confidence and Trust in Others

At the same time the baby is experiencing an emerging self-assurance, they also are developing a complementary sense of confidence in others. The baby is learning to trust that their needs will be noticed and that the world will respond. So, along with the positive sense of self, the baby develops the sense of trust in the caregiver. Trust is essential to how the baby feels about what they can expect from people in the world: Will people help? Will they



hurt? Will they not notice? Should I trust people? Can I trust myself?

When the caregiver pays close attention to an infant’s need to trust themselves or another, the caregiver is not only satisfying the child’s hunger or lessening the discomfort, but also creating a confidence within the infant, others, and the way the world behaves. That confidence is far more meaningful than momentarily satisfying hunger.

Astonishingly quickly, a baby begins to have expectations about what will happen when a need is expressed or who will do what to whom. Caregiver–child interactions work best for babies when the baby can begin to *predict* what will happen. For that to occur, the baby must be cared for in a consistent setting and get used to where things are and when things usually happen. For example, when the baby is cared for by the same few people for months at a time, the baby becomes familiar with how the caregiver will treat them.

Babies can adapt to different caregiver styles, but not without some costs. Each caregiver

- has their own personal style;
- picks up a baby differently from anyone else;
- picks up different babies differently;
- has their own unique voice, smell, and rhythms; and
- is faster or slower, more vigorous or more gentle than another.

Babies learn to anticipate those circumstances very rapidly. Within days, babies recognize the caregiver's smell, face, and voice.

If a total shift of caregivers occurs, babies as young as two months of age demonstrate their distress by having feeding and sleeping problems. To some extent, the distress can be understood as a reaction to the disruption of the babies' ability to predict what will happen—they do not know what to expect.

This example illustrates the problem: The disruption is like learning to dance perfectly with one partner and then suddenly being confronted with another. The steps you know do not work—the new partner is kicking you in the leg, and it feels awful. Your sense of control, the ability to predict your part in the dance, is badly damaged. You feel insecure and are not even sure if you can dance at all. If one faces an endless stream of new partners, one may learn to dance with all of them, but one will always have to let them lead, and the lovely integration of partners will not be possible to achieve. In contrast, a dance with the same partner every time is personalized and intimate.

The caregiver predicts the baby's response just as the baby predicts the caregiver's:

Two sets of eyebrows are raised almost simultaneously, a smile begins on one face and broadens on the other, the lips are pursed, the other smiles and bursts into laughter. Then the partner's lips are pursed again, and the dance continues.

The imitations, the leads in even so small an exchange as a series of smiles and mouth movements are most meaningful. The wonderful ability of a caregiver to keep their face endlessly interesting and responsive to the slightest variation in the baby's cues is an internal, unconscious response. But the response is based on the intimate knowledge of the baby, on the ability to know without thinking what the next right move is.

Gift Four: Help Babies Learn About Intimacy

Intimacy or closeness between infant and caregiver can develop only when both have enough time together to know each other well. Babies are always ready for closeness when both the infant and caregiver have enough time together, but they need a caregiver—or, at most, two or three caregivers—who knows them, likes them, and is principally responsible for their care. More than three caregivers tax





the very young child and dilute the quality and depth of the baby's relationships.

Caregivers help babies develop the ability to engage in intimate interactions when caregivers do not stretch babies beyond their limits. The fewer the caregivers with whom a baby must learn to “dance,” the safer the baby is from having their ability for intimacy overtaxed. Caregiving programs should ensure that no one caregiver has more than three young infants for whom they are the principal caregiver and that the infants are almost always the same infants. This practice will preserve the infant's capacity for closeness and intimacy, a capacity that affects everything that makes a baby feel effective, competent, and in tune with the caregiver.

Ordinary caregiving routines are special opportunities for closeness. These include

- welcoming a child in the morning;
- feeding, diapering, cleaning the face and hands;
- putting a child down and getting the child up from a nap;

- getting a child dressed; and
- preparing a child to go home.

Routines are not tasks to be rushed through but moments when the child learns that the caregiver knows and respects the child's likes, dislikes, moods, and fears. The caregiver's actions lay the foundation for a lifetime of such communication. Nothing could be more important.

Gift Five: Help Toddlers Learn That Adults Cannot Solve Every Problem

For the toddler as well as the younger infant, it is equally important to have a caregiver who is intimate and trustworthy, who knows the child well, and who provides for that child individually. The toddler stage is also the time, however, for the caregiver to move from readily meeting the child's needs to helping the child see that they have some desires that the caregiver cannot and will not satisfy. The caregiver can expect the toddler gradually to show increased tolerance for delay and for the caregiver's inability, at times, to gratify the toddler's demands and wishes. An important caregiver role is to recognize and take full advantage of the toddler's rapidly developing capacity to accept the caregiver's limits to meet all the toddler's desires.

It is vital for toddlers to learn that adults do not have the power to make the world perfect. Sometimes caregivers can help toddlers appreciate adults' limits more easily than parents can. Caregivers are far freer than parents are from the powerful, passionate attachment to the child that sometimes pushes parents to present themselves as people who can solve any problem and always make the child happy. If they could, many parents would create a world for their child where everything was good

and where joy, happiness, and contentment were the only emotions experienced.

Sometimes caregivers may lean in that direction, too. For the caregiver who feels that way and sends that message, a great tangle of emotions occurs when a child sees the caregiver as a source of unhappiness. What the child wants may be unreasonable, and yet the child behaves as if the caregiver is deliberately cruel. In such a situation, the following may result:

1. If the caregiver feels that they *should* make everything all right and cannot, the caregiver feels guilty. That makes the caregiver angry, and soon what should be a simple, “No, I’m sorry,” is an angry “No!” or worse.
2. If the caregiver changes their mind along the way and lets the toddler have what the caregiver’s judgment says the toddler should not have, the caregiver runs the danger of agreeing with the child that the caregiver is the source of all pleasure and displeasure. By doing so, the caregiver supports rather than weakens the child’s notion that if the child feels bad, it is the caregiver’s fault and that the caregiver could fix it if they wanted to. It is vital that children learn that the caregiver cannot always make everything all right.

What is needed in this situation is another kind of dance, one slightly different from the dance with younger infants. The dance now shows the child that the caregiver will still give what is possible but that the caregiver cannot give everything—and some things the caregiver should not give at all. There is a gradual caregiving transition from the role of principal provider to a role that

helps the toddler see that they, too, have some responsibility for their own feelings. This gift must be given sensitively so that the caregiver does not expect too much too soon and the toddler does not feel suddenly abandoned.

Gift Six: Be Tolerant of Toddlers’ Internal Conflicts and Desires

As infants move into toddlerhood, they want and demand many things that are harmful, dangerous, or totally impossible. Caregivers occasionally frustrate some powerful wishes and are called on to satisfy the unsatisfiable. How caregivers understand and feel about those situations matters as much as the child’s behavior does. The caregiver’s feelings are quickly and easily sensed by the toddler, and the message the toddler receives about how the caregiver evaluates them at those times is extremely important to the toddler’s development.

The toddler may express internal conflicts and desires: “I will be big. I will be small. I will be big-small!” “I want orange—no, grape—no, orange—no,



grape—no, orange—no, strawberry.” It is easy to get caught up in this internal conflict by, for example, in the latter instance, fetching a series of drinks for the grumpy toddler, none of which does the trick. The drinks do not help, because the toddler wants them all—some magical, multicolored drink that will fix the toddler’s bad feelings. But those feelings really have nothing to do with drinks, multicolored or otherwise.

At such a time the caregiver needs to recognize the child’s dilemma, sympathize with it, stop the futile attempts to please, and offer a hug—essentially calling a halt to efforts to please. If the toddler refuses all juice, fine; the caregiver accepts the child’s control cheerfully. If the child flings himself on the floor, the caregiver offers sympathy and comfort but does not get caught up in the child’s tantrum. If the caregiver can recognize, for example, that a certain toddler is out of sorts and that the toddler’s insistence on having another cupcake is not really about cupcakes at all, the caregiver can offer that child comfort instead of exasperation.

The following example illustrates the importance of accepting and allowing the child’s feelings.



When Sophia wants to explore the electronic tablet that was brought in to play music for dancing, she has a fit when the caregiver stops her. The caregiver can admire Sophia’s curiosity and acknowledge that her wish to explore the electronic tablet and how it works is splendid. The caregiver can tell Sophia that she knows Sophia wants to play with the electronic tablet.

Of course Sophia is grumpy when she is not permitted to do so. The caregiver will not expect the child to always take such things graciously. Most importantly, the caregiver allows Sophia to own her feelings.

By accepting and allowing a child’s feelings, even as caregivers control the child’s behavior, caregivers help the toddler greatly.

Gift Seven: Help Toddlers Sort Out the Evaluations of Adults

When a toddler is angry and unhappy, it is often hard for the caregiver to acknowledge, without feeling defensive and guilty, either that they have caused the anger and unhappiness or that the toddler blames the caregiver for causing those emotions. Many times, because of the caregiver’s discomfort, they want the child to drop the issue quickly and be good-natured. The caregiver wishes that the toddler would stop expressing the pain and unhappiness the toddler feels, because the behavior offers continuing evidence that the toddler feels wronged. At such times both the toddler and the caregiver will benefit if the caregiver can sort out the feelings for the child.

The earlier example of Sophia and the electronic tablet shows that Sophia needs to know just what she has been told she should not do and what part of her action is all right with the caregiver. Too often, all of the child's behavior is treated as one problem: the curiosity, the disappointment and anger, and the resulting behavior are not separated. With that kind of reaction from the caregiver, Sophia is being asked to give up not only all her actions but also her feelings. As far as she knows, the feeling of curiosity that prompted her contact with the electronic tablet was bad, her unhappiness was bad, and her grumpy behavior was bad. When the caregiver points out to Sophia exactly what part of the bundle of behaviors and feelings will not be allowed and what is all right, Sophia feels better. Through word and action, the caregiver communicates:

I think it is good for you to be curious. And it is natural for you to feel disappointed or angry when your curiosity is stifled. I want you to love your curiosity and treasure it as I do and know that it is all right with me if you feel disappointed or angry. What you may not do is touch the electronic tablet while it is playing or kick me because I stop you from touching it.



When a caregiver does this kind of sensitive sorting out, they give the child another precious gift. And the gift often makes the caregiver's own job easier because the child does not have so many things to be frustrated about. The sorting out

- helps the child handle and tolerate feelings and
- helps the child learn what their feelings are.

By naming feelings, accepting feelings, and never demanding that children not feel them or not have some way to express them, caregivers create a mentally healthy environment for growth.

Gift Eight: Match Your Reaction to the Temperament of the Baby

Review the strategies from the chapter “Viewing Temperament as a Window for Understanding How Young Children Relate to the World Around Them.” Because the topic is covered well there, the strategies are not repeated here except to say that accepting, rather than trying to change, a young child’s temperament is central to the caregiver’s role in building the child’s self-esteem.

Gift Nine: Exchange Information with Parents About Their Children

Continuity of care is important to the emotional security of both infants and toddlers. This continuity is helped by the careful exchange of information about the child’s development, the child’s mood and behavior, and significant things that happen to the child. Also relevant is what kind of day the child has had prior to the moment of exchange of responsibility.

Taking the time to share the information ensures continuity of understanding and forges the quality of relationship between parent and caregiver that the child needs. The exchange of information works both ways. For example, a parent can let the caregiver know that Selena really did not want to come to the program today because no one could find her favorite doll that morning. The caregiver’s awareness of the child’s feelings will help to make a better day for both the child and the caregiver.



Gift Ten: Remind Children in Child Care of the Absent Parents’ Continued Existence

There should be ready reminders for children in child care of their parents’ continued existence. Pictures, items from home, and conversation about absent parents contribute to the children’s sense of security about their parents’ guaranteed return. For children who have trouble with the switch in care from caregiver to parent, caregivers can help by discussing when the parents will come and what the child might do to engage the parent (“Look what I made!”).

Talking with the parent also ensures a less abrupt shift. The caregiver can help the parent understand the meaning of the behavior of the child so that a parent will not misinterpret the behavior. The following example illustrates a caregiver’s response to a difficult transition.

“Brandon has really been missing you today and is giving you the cold shoulder so you’ll be sure to get the message.” The caregiver may suggest that the parent say, “I really wondered what you were doing today, Brandon. When you’re ready, I’ll be right here and we can go.” That gives Brandon time to wrestle with his feelings, gives him control, and offers a way to approach his parent when he is ready.

This kind of help with transitions can avoid a lot of misunderstanding, hurt feelings, and perhaps the beginning of a bad evening. In addition, a sensitive response to the child who is having difficulty with transitions contributes to the child’s sense of trust, security, and importance.

Conclusion

The caregiver who creates an atmosphere and a relationship with infants and toddlers in which the children are helped to feel effective, trusting, mutually engaged with the caregiver, personally known and understood, and the proper owner of their own wishes and feelings gives an enormous gift to the children and their parents. With this gift the children’s emotional security and self-esteem will develop naturally. Caring for such children will be easier and more pleasurable. The caregivers will see the evidence of their dedication, understanding, and hard work in the healthy emotional development of the children in their care. There can be no better reward.

Appendix: Social–Emotional Development Foundations

From California/Infant Toddler Learning and Development Foundations

Social–emotional development includes the child’s experience, expression, and management of emotions and the ability to establish positive and rewarding relationships with others (Cohen et al. 2005). It encompasses both intra- and interpersonal processes.

The core features of emotional development include the ability to identify and understand one’s own feelings, to accurately read and comprehend emotional states in others, to manage strong emotions and their expression in a constructive manner, to regulate one’s own behavior, to develop empathy for others, and to establish and maintain relationships. (National Scientific Council on the Developing Child 2004a, 2)

Infants experience, express, and perceive emotions before they fully understand them. In learning to recognize, label, manage, and communicate their emotions and to perceive and attempt to understand the emotions of others, children build skills that connect them with family, peers, teachers, and the community. These growing capacities help young children to become competent

in negotiating increasingly complex social interactions, to participate effectively in relationships and group activities, and to reap the benefits of social support crucial to healthy human development and functioning.

Healthy social–emotional development for infants and toddlers unfolds in an interpersonal context, namely that of positive ongoing relationships with familiar, nurturing adults. Young children are particularly attuned to social and emotional stimulation. Even newborns appear to attend more to stimuli that resemble faces (Johnson et al. 1991). They also prefer their mothers’ voices to the voices of other women (DeCasper and Fifer 1980). Through nurturance, adults support the infants’ earliest experiences of emotion regulation (Bronson 2000a; Thompson and Goodvin 2005).

Responsive caregiving supports infants in beginning to regulate their emotions and to develop a sense of predictability, safety, and responsiveness in their social environments. Early relationships are so important to developing infants that research experts have broadly concluded that, in the early years, “nurturing, stable and consistent relationships are the key

to healthy growth, development and learning” (National Research Council and Institute of Medicine 2000, 412). In other words, high-quality relationships increase the likelihood of positive outcomes for young children (Shonkoff 2004). Experiences with family members and teachers provide an opportunity for young children to learn about social relationships and emotions through exploration and predictable interactions. Professionals working in child care settings can support the social-emotional development of infants and toddlers in various ways, including interacting directly with young children, communicating with families, arranging the physical space in the care environment, and planning and implementing curriculum.

Brain research indicates that emotion and cognition are profoundly interrelated processes. Specifically, “recent cognitive neuroscience findings suggest that the neural mechanisms underlying emotion regulation may be the same as those underlying cognitive processes” (Bell and Wolfe 2004, 366). Emotion and cognition work together, jointly informing the child’s impressions of situations and influencing behavior. Most learning in the early years occurs in the context of emotional supports (National Research Council and Institute of Medicine 2000). “The rich interpenetrations of emotions and cognitions establish the major psychic scripts for each child’s life” (Panksepp 2001). Together, emotion and cognition contribute to attentional processes, decision-making, and learning (Cacioppo and Berntson 1999). Furthermore, cognitive processes, such as decision-making, are affected by emotion (Barrett et al. 2007). Brain structures involved in the neural circuitry of cognition

influence emotion and vice versa (Barrett et al. 2007). Emotions and social behaviors affect the young child’s ability to persist in goal-oriented activity, to seek help when it is needed, and to participate in and benefit from relationships.

Young children who exhibit healthy social, emotional, and behavioral adjustment are more likely to have good academic performance in elementary school (Cohen et al. 2005; ZERO TO THREE 2004). The sharp distinction between cognition and emotion that has historically been made may be more of an artifact of scholarship than it is representative of the way these processes occur in the brain (Barrett et al. 2007). This recent research strengthens the view that early childhood programs support later positive learning outcomes in all domains by maintaining a focus on the promotion of healthy social-emotional development (National Scientific Council on the Developing Child 2004a; Raver 2002; Shonkoff 2004).

Interactions with Adults

Interactions with adults are a frequent and regular part of infants’ daily lives. Infants as young as three months of age have been shown to be able to discriminate between the faces of unfamiliar adults (Barrera and Maurer 1981). The foundations that describe interactions with adults and relationships with adults are interrelated. They jointly give a picture of healthy social-emotional development that is based in a supportive social environment established by adults. Children develop the ability to both respond to adults and engage with them first through predictable interactions in close relationships with parents or other caring adults at home and outside the

home. Children use and build upon the skills learned through close relationships to interact with less familiar adults in their lives. In interacting with adults, children engage in a wide variety of social exchanges such as establishing contact with a relative or engaging in storytelling with an infant care teacher.

Quality in early childhood programs is, in large part, a function of the interactions that take place between the adults and children in those programs. These interactions form the basis for the relationships that are established between teachers and children in the classroom or home and are related to children's developmental status. How teachers interact with children is at the very heart of early childhood education (Kontos and Wilcox-Herzog 1997, 11).

Relationships with Adults

Close relationships with adults who provide consistent nurturance strengthen children's capacity to learn and develop. Moreover, relationships with parents, other family members, caregivers, and teachers provide the key context for infants' social-emotional development. These special relationships influence the infants' emerging sense of self and understanding of others. Infants use relationships with adults in many ways: for reassurance that they are safe, for assistance in alleviating distress, for help with emotion regulation, and for social approval or encouragement. Establishing close relationships with adults is related to children's emotional security, sense of self, and evolving understanding of the world around them. Concepts from the literature on attachment may be applied to early childhood settings in considering the infant care teacher's role in

separations and reunions during the day in care, facilitating the child's exploration, providing comfort, meeting physical needs, modeling positive relationships, and providing support during stressful times (Raikes 1996).

Interactions with Peers

In early infancy children interact with each other using simple behaviors such as looking at or touching another child. Infants' social interactions with peers increase in complexity from engaging in repetitive or routine back-and-forth interactions with peers (for example, rolling a ball back and forth) to engaging in cooperative activities such as building a tower of blocks together or acting out different roles during pretend play. Through interactions with peers, infants explore their interest in others and learn about social behavior/social interaction. Interactions with peers provide the context for social learning and problem solving, including the experience of social exchanges, cooperation, turn-taking, and the demonstration of the beginning of empathy. Social interactions with peers also allow older infants to experiment with different roles in small groups and in different situations such as relating to familiar versus unfamiliar children. As noted, the foundations called Interactions with Adults, Relationships with Adults, Interactions with Peers, and Relationships with Peers are interrelated. Interactions are stepping-stones to relationships. Burk (1996, 285) writes

We, as teachers, need to facilitate the development of a psychologically safe environment that promotes positive social interaction. As children interact openly with their

peers, they learn more about each other as individuals, and they begin building a history of interactions.

Relationships with Peers

Infants develop close relationships with children they know over a period of time, such as other children in the family child care setting or neighborhood. Relationships with peers provide young children with the opportunity to develop strong social connections. Infants often show a preference for playing and being with friends, as compared with peers with whom they do not have a relationship. Howes' (1983) research suggests that there are distinctive patterns of friendship for the infant, toddler, and preschooler age groups. The three groups vary in the number of friendships, the stability of friendships, and the nature of interaction between friends (for example, the extent to which they involve object exchange or verbal communication).

Identity of Self in Relation to Others

Infants' social-emotional development includes an emerging awareness of self and others. Infants demonstrate this foundation in a number of ways. For example, they can respond to their names, point to their body parts when asked, or name members of their families. Through an emerging understanding of other people in their social environment, children gain an understanding of their roles within their families and communities. They also become aware of their own preferences and characteristics and those of others.

Recognition of Ability

Infants' developing sense of self-efficacy includes an emerging understanding that they can make things happen and that they have particular abilities. Self-efficacy is related to a sense of competency, which has been identified as a basic human need (Connell 1990). The development of children's sense of self-efficacy may be seen in play or exploratory behaviors when they act on an object to produce a result. For example, they pat a musical toy to make sounds come out. Older infants may demonstrate recognition of ability through "I" statements, such as "I did it" or "I'm good at drawing."

Expression of Emotion

Even early in infancy, children express their emotions through facial expressions, vocalizations, and body language. The later ability to use words to express emotions gives young children a valuable tool in gaining the assistance or social support of others (Saarni et al. 2006). Temperament may play a role in children's expression of emotion. Tronick (1989, 112) described how expression of emotion is related to emotion regulation and communication between the mother and infant: "the emotional expressions of the infant and the caretaker function to allow them to mutually regulate their interactions . . . the infant and the adult are participants in an affective communication system."

Both the understanding and expression of emotion are influenced by culture. Cultural factors affect children's growing understanding of the meaning of emotions, the developing knowledge of which situations lead to which emotional

outcomes, and their learning about which emotions are appropriate to display in which situations (Thompson and Goodvin 2005). Some cultural groups appear to express certain emotions more often than other cultural groups (Tsai, Levenson, and McCoy 2006). In addition, cultural groups vary by which particular emotions or emotional states they value (Tsai, Knutson, and Fung 2006). One study suggests that cultural differences in exposure to particular emotions through storybooks may contribute to young children's preferences for particular emotional states (for example, excited or calm) (Tsai et al. 2007).

Young children's expression of positive and negative emotions may play a significant role in their development of social relationships. Positive emotions appeal to social partners and seem to enable relationships to form, while problematic management or expression of negative emotions leads to difficulty in social relationships (Denham and Weissberg 2004). The use of emotion-related words appears to be associated with how likable preschoolers are considered by their peers. Children who use emotion-related words were found to be better liked by their classmates (Fabes et al. 2001). Infants respond more positively to adult vocalizations that have a positive affective tone (Fernald 1993). Social smiling is a developmental process in which neurophysiology and cognitive, social, and emotional factors play a part, seen as a "reflection and constituent of an interactive relationship" (Messinger and Fogel 2007, 329). It appears likely that the experience of positive emotions is a particularly important contributor to emotional well-being and psychological health (Fredrickson 2000, 2003; Panksepp 2001).

Empathy

During the first three years of life, children begin to develop the capacity to experience the emotional or psychological state of another person (Zahn-Waxler and Radke-Yarrow 1990). The following definitions of empathy are found in the research literature: "knowing what another person is feeling," "feeling what another person is feeling," and "responding compassionately to another's distress" (Levenson and Ruef 1992, 234). The concept of empathy reflects the social nature of emotion, as it links the feelings of two or more people (Levenson and Ruef 1992). Since human life is relationship-based, one vitally important function of empathy over the life span is to strengthen social bonds (Anderson and Keltner 2002). Research has shown a correlation between empathy and prosocial behavior (Eisenberg 2000). In particular, prosocial behaviors, such as helping, sharing, and comforting or showing concern for others, illustrate the development of empathy (Zahn-Waxler et al. 1992) and how the experience of empathy is thought to be related to the development of moral behavior (Eisenberg 2000). Adults model prosocial/empathic behaviors for infants in various ways. For example, those behaviors are modeled through caring interactions with others or through providing nurturance to the infant. Quann and Wien (2006, 28) suggest that one way to support the development of empathy in young children is to create a culture of caring in the early childhood environment: "Helping children understand the feelings of others is an integral aspect of the curriculum of living together. The relationships among teachers, between children and teachers, and among children are fostered with warm and caring interactions."

Emotion Regulation

The developing ability to regulate emotions has received increasing attention in the research literature (Eisenberg, Champion, and Ma 2004). Researchers have generated various definitions of emotion regulation, and debate continues as to the most useful and appropriate way to define this concept (Eisenberg and Spinrad 2004). As a construct, emotion regulation reflects the interrelationship of emotions, cognitions, and behaviors (Bell and Wolfe 2004). Young children's increasing understanding and skill in the use of language is of vital importance in their emotional development, opening new avenues for communicating about and regulating emotions (Campos, Frankel, and Camras 2004) and helping children to negotiate acceptable outcomes to emotionally charged situations in more effective ways. Emotion regulation is influenced by culture and the historical era in which a person lives: cultural variability in regulation processes is significant (Mesquita and Frijda 1992). "Cultures vary in terms of what one is expected to feel, and when, where, and with whom one may express different feelings" (Cheah and Rubin 2003, 3). Adults can provide positive role models of emotion regulation through their behavior and through the verbal and emotional support they offer children in managing their emotions. Responsiveness to infants' signals contributes to the development of emotion regulation. Adults support infants' development of emotion regulation by minimizing exposure to excessive stress, chaotic environments, or over- or understimulation.

Emotion skills are important in part because they play a role in how well children are liked by peers and teachers and how socially competent they are perceived to be (National Scientific Council on the Developing Child 2004a). Children's ability to regulate their emotions appropriately can contribute to perceptions of their overall social skills as well as to the extent to which they are liked by peers (Eisenberg et al. 1993). Poor emotion regulation can impair children's thinking, thereby compromising their judgment and decision-making (National Scientific Council on the Developing Child 2004a). At kindergarten entry, children demonstrate broad variability in their ability to self-regulate (National Research Council and Institute of Medicine 2000).

Impulse Control

Children's developing capacity to control impulses helps them adapt to social situations and follow rules. As infants grow, they become increasingly able to exercise voluntary control over behavior such as waiting for needs to be met, inhibiting potentially hurtful behavior, and acting according to social expectations, including safety rules. Group care settings provide many opportunities for children to practice their impulse-control skills. Peer interactions often offer natural opportunities for young children to practice impulse control as they make progress in learning about cooperative play and sharing. Young children's understanding or lack of understanding of requests made of them may be one factor contributing to their responses (Kaler and Kopp 1990).

Social Understanding

During the infant/toddler years, children begin to develop an understanding of the responses, communication, emotional expression, and actions of other people. This development includes infants' understanding of what to expect from others, how to engage in back-and-forth social interactions, and which social scripts are to be used for which social situations. "At each age, social cognitive understanding contributes to social competence, interpersonal sensitivity, and an awareness of how the self relates

to other individuals and groups in a complex social world" (Thompson 2006, 26). Social understanding is particularly important because of the social nature of humans and human life, even in early infancy (Wellman and Lagattuta 2000). Recent research suggests that infants' and toddlers' social understanding is related to how often they experience adult communication about the thoughts and emotions of others (Taumoepeau and Ruffman 2008).

Foundation: Interactions with Adults

The developing ability to respond to and engage with adults

8 months	18 months	36 months
At around eight months of age, children purposefully engage in reciprocal interactions and try to influence the behavior of others. Children may be both interested in and cautious of unfamiliar adults. (7 mos.; Lamb, Bornstein, and Teti 2002, 340)(8 mos.; Meisels et al. 2003, 16)	At around 18 months of age, children may participate in routines and games that involve complex back-and-forth interaction and may follow the gaze of the infant care teacher to an object or person. Children may also check with a familiar infant care teacher when uncertain about something or someone. (18 mos.; Meisels et al. 2003, 33)	At around 36 months of age, children interact with adults to solve problems or communicate about experiences or ideas. (California Department of Education 2005, 6; Marvin and Britner 1999, 60)
For example, the child may:	For example, the child may:	For example, the child may:
<ul style="list-style-type: none"> Attend to an unfamiliar adult with interest but show wariness or become anxious when that adult comes too close. (5–8 mos.; Parks 2004; Johnstone and Scherer 2000, 222) Take the infant care teacher's hands and rock forward and backwards as a way of asking her to sing a favorite song. (8 mos.; Gustafson, Green, and West 1979; Kaye and Fogel 1980) Engage in games such as pat-a-cake and peekaboo. (7–9 mos.; Coplan 1993, 3) Make eye contact with a family member. Vocalize to get an infant care teacher's attention. 	<ul style="list-style-type: none"> Move close to the infant care teacher and hold his hand when a visitor enters the classroom but watch the visitor with interest. (18 mos.; Meisels et al. 2003) Bring a familiar object to an adult when asked. (15–18 mos.; Parks 2004) Allow an unfamiliar adult to get close only after the adult uses an object to bridge the interaction, such as showing interest in a toy that is also interesting to the child. (18 mos.; Meisels et al. 2003) Watch and then help the infant care teacher as she prepares snack. Seek reassurance from the infant care teacher when unsure if something is safe. (10–12 mos.; Fogel 2001, 305; Dickstein and Parke 1988; Hirshberg and Svejda 1990) 	<ul style="list-style-type: none"> Participate in storytelling with the infant care teacher. (30–36 mos.; Parks 2004) Tell a teacher from the classroom next door about an upcoming birthday party. (36 mos.; Parks 2004) Help the infant care teacher bring in the wheeled toys from the play yard at the end of the day. Ask a classroom visitor her name.

Chart continues on next page.

Interactions with Adults continued

Behaviors leading up to the foundation (4 to 7 months)	Behaviors leading up to the foundation (9 to 17 months)	Behaviors leading up to the foundation (19 to 35 months)
<p>During this period, the child may:</p> <ul style="list-style-type: none"> Engage in playful, face-to-face interactions with an adult, such as taking turns vocalizing and then smiling or laughing. (2–7 mos.; Lamb, Bornstein, and Teti 2002, 375) Begin to protest separations from significant adults. 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> Engage in back-and-forth interaction by handing a parent an object, then reaching to receive the object when it is handed back. (9–12 mos.; Lerner and Ciervo 2003) Show—but not give—a toy to the infant care teacher. (9–12 mos.; Parks 2004) 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> Practice being a grown-up during pretend play by dressing up or using a play stove. (18–36 mos.; Lerner and Dombro 2000) Help the infant care teacher clean up after snack by putting snack dishes in the dish bin.

Foundation: Relationships with Adults

The development of close relationships with certain adults who provide consistent nurturance

8 months	18 months	36 months
At around eight months of age, children seek a special relationship with one (or a few) familiar adult(s) by initiating interactions and seeking proximity, especially when distressed. (6–9 mos.; Marvin and Britner 1999, 52)	At around 18 months of age, children feel secure exploring the environment in the presence of important adults with whom they have developed a relationship over an extended period of time. When distressed, children seek to be physically close to these adults. (6–18 mos.; Marvin and Britner 1999, 52; Bowlby 1983)	At around 36 months of age, when exploring the environment, from time to time children reconnect, in a variety of ways, with the adult(s) with whom they have developed a special relationship: through eye contact; facial expressions; shared feelings; or conversations about feelings, shared activities, or plans. When distressed, children may still seek to be physically close to these adults. (by 36 mos.; Marvin and Britner 1999, 57)

For example, the child may:	For example, the child may:	For example, the child may:
<ul style="list-style-type: none"> • Seek comfort from the infant care teacher by crying and looking for him. (7 mos.; Lamb, Bornstein, and Teti 2002, 372) • Cry out or follow after a parent when dropped off at the child care program. (6–9 mos.; Ainsworth 1967, 4) • Lift her arms to be picked up by the special infant care teacher. (8 mos.; Meisels et al. 2003, 17; Ainsworth 1967, 5) • Crawl toward a parent when startled by a loud noise. (8.5 mos.; Marvin and Britner 1999, 52) • Turn excitedly and raise his arms to greet a family member at pickup time. (8 mos.; Ainsworth 1967, 5) 	<ul style="list-style-type: none"> • Run in wide circles around the outdoor play area, circling back each time and hugging the legs of the infant care teacher before running off again. • Snuggle with the special infant care teacher when feeling tired or grumpy. • Wave at the special infant care teacher from the top of the slide to make sure he is watching. • Follow a parent physically around the room. • Play away from the infant care teacher and then move close to him from time to time to check in. (12 mos.; Davies 2004, 10) 	<ul style="list-style-type: none"> • Feel comfortable playing on the other side of the play yard away from the infant care teacher, but cry to be picked up after falling down. (24–36 mos.; Lamb, Bornstein, and Teti 2002, 376) • Call “Mama!” from across the room while playing with dolls to make sure that the mother is paying attention. (24–36 mos.; Schaffer and Emerson 1964) • Call for a family member and look out the window for him after being dropped off at school. (24–36 mos.; Marvin and Britner 1999, 56) • Communicate “This is our favorite part” when reading a funny story with the infant care teacher. • Bring the grandmother’s favorite book to her and express “One more?” to see if she will read one more book, even though she has just said “We’re all done reading. Now it’s time for nap.” (Teti 1999; 18–36 mos.; Marvin and Britner 1999, 59) • Cry and look for the special infant care teacher after falling. • Seek the attention of the special infant care teacher and communicate “Watch me!” before proudly displaying a new skill.

Chart continues on next page.

Relationships with Adults continued

Behaviors leading up to the foundation (4 to 7 months)	Behaviors leading up to the foundation (9 to 17 months)	Behaviors leading up to the foundation (19 to 35 months)
<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Hold on to a parent’s sweater when being held. (5 mos.; Marvin and Britner 1999, 51; Ainsworth 1967, 1) • Babble back and forth with the infant care teacher. (3–6 mos.; Caufield 1995) • Be more likely to smile when approached by the infant care teacher rather than by a stranger. (3–6 mos.; Marvin and Britner 1999, 50) • Cry when an unfamiliar adult gets too close. (7 mos.; Bronson 1972) 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Cry and ask for a parent after being dropped off in the morning. (9–12 mos.; Lerner and Ciervo 2003) • Look for a smile from the infant care teacher when unsure if something is safe. (10–12 mos.; Fogel 2001, 305; Dickstein and Parke 1988; Hirshberg and Svejda 1990) • Cling to a parent when feeling ill. (10–11 mos.; Marvin and Britner 1999, 52) 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Say “I go to school. Mama goes to work” after being dropped off in the morning. • Gesture for one more hug as a parent is leaving for work.

Foundation: Interactions with Peers

The developing ability to respond to and engage with other children

8 months	18 months	36 months
At around eight months of age, children show interest in familiar and unfamiliar peers. Children may stare at another child, explore another child's face and body, and respond to siblings and older peers. (8 mos.; Meisels et al. 2003)	At around 18 months of age, children engage in simple back-and-forth interactions with peers for short periods of time. (Meisels et al. 2003, 35)	At around 36 months of age, children engage in simple cooperative play with peers. (36 mos.; Meisels et al. 2003, 70)
For example, the child may:	For example, the child may:	For example, the child may:
<ul style="list-style-type: none"> • Watch other children with interest. (8 mos.; Meisels et al. 2003) • Touch the eyes or hair of a peer. (8 mos.; Meisels et al. 2003) • Attend to a crying peer with a serious expression. (7 mos.; American Academy of Pediatrics 2004, 212) • Laugh when an older sibling or peer makes a funny face. (8 mos.; Meisels et al. 2003) 	<ul style="list-style-type: none"> • Hit another child who takes a toy. (18 mos.; Meisels et al. 2003, 35) • Offer a book to another child, perhaps with encouragement from the infant care teacher. (18 mos.; Meisels et al. 2003, 35) • Tickle another child, get tickled back, and tickle him again. (18 mos.; Meisels et al. 2003, 35) • Engage in reciprocal play, such as run-and-chase or offer-and-receive. (12–13 mos.; Howes et al. 1988, v; 10–12 mos.; Ross and Goldman 1977) • Play ball with a peer by rolling the ball back and forth to each other. (12–15 mos.; Parks 2004; 9–16 mos.; Frankenburg 1990) 	<ul style="list-style-type: none"> • Communicate with peers while digging in the sandbox together. (29–36 mos.; Hart and Risley 1999, 124) • Act out different roles with peers, sometimes switching in and out of her role. (by 36 mos.; Segal 2004, 44) • Build a tall tower with one or two other children. (36 mos.; Meisels et al. 2003, 70) • Hand a peer a block or piece of railroad track when building.

Chart continues on next page.

Interactions with Peers continued

Behaviors leading up to the foundation (4 to 7 months)	Behaviors leading up to the foundation (9 to 17 months)	Behaviors leading up to the foundation (19 to 35 months)
<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Notice other infants and children while sitting on a parent's or infant care teacher's lap. • Cry when hearing another baby cry. (4 mos.; Meisels et al. 2003, 10) 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Engage in solitary play. (toddler; Segal 2004, 38) • Play a reciprocal game, such as pat-a-cake, with the infant care teacher and a peer. (7–11 mos.; Frankenburg 1990) 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Use gestures to communicate a desire to play with a peer. (18–24 mos.; Parks 2004, 123) • Refuse to let a peer have a turn on the swing. (24 mos.; Meisels et al. 2003, 45) • Push or bite when another child takes a toy. (24–30 mos.; Parks 2004) • Engage in complementary interactions, such as feeding a stuffed animal that another child is holding or pulling a friend in the wagon. (24–30 mos.; Meisels et al. 2003, 57; Howes and Matheson 1992, 967) • Join a group of children who are together in one play space and follow them as they move outside. (30 mos.; Meisels et al. 2003, 57)

Foundation: Relationships with Peers

The development of relationships with certain peers through interactions over time

8 months	18 months	36 months
At around eight months of age, children show interest in familiar and unfamiliar children. (8 mos.; Meisels et al. 2003, 17)	At around 18 months of age, children prefer to interact with one or two familiar children in the group and usually engage in the same kind of back-and-forth play when interacting with those children. (12–18 mos.; Mueller and Lucas 1975)	At around 36 months of age, children have developed friendships with a small number of children in the group and engage in more complex play with those friends than they do with other peers.
For example, the child may:	For example, the child may:	For example, the child may:
<ul style="list-style-type: none"> • Watch other children with interest. (8 mos.; Meisels et al. 2003) • Touch the eyes or hair of a peer. (8 mos.; Meisels et al. 2003) • Attend to a crying peer with a serious expression. (7 mos.; American Academy of Pediatrics 2004, 212) • Laugh when an older sibling or peer makes a funny face. (8 mos.; Meisels et al. 2003) • Try to get the attention of another child by smiling at him or babbling to him (6–9 mos.; Hay, Pederson, and Nash 1982) 	<ul style="list-style-type: none"> • Play the same kind of game, such as run-and-chase, with the same peer almost every day. (Howes 1987, 259) • Choose to play in the same area as a friend. (Howes 1987, 259) 	<ul style="list-style-type: none"> • Choose to play with a sibling instead of a less familiar child. (24–36 mos.; Dunn 1983, 795) • Exhibit sadness when the favorite friend is not at school one day. (24–36 mos.; Melson and Cohen 1981) • Seek one friend for running games and another for building with blocks. (Howes 1987) • Play “train” with one or two friends for an extended period of time by pretending that one is driving the train and the rest are riding.
Behaviors leading up to the foundation (4 to 7 months)	Behaviors leading up to the foundation (9 to 17 months)	Behaviors leading up to the foundation (19 to 35 months)
During this period, the child may: <ul style="list-style-type: none"> • Look at another child who is lying on the blanket nearby. (4 mos.; Meisels et al. 2003, 10) • Turn toward the voice of a parent or older sibling. (4 mos.; Meisels et al. 2003, 10) 	During this period, the child may: <ul style="list-style-type: none"> • Watch an older sibling play nearby. (12 mos.; Meisels et al. 2003, 26) • Bang blocks together next to a child who is doing the same thing. (12 mos.; Meisels et al. 2003, 26) • Imitate the simple actions of a peer. (9–12 mos.; Ryalls, Gul, and Ryalls 2000) 	During this period, the child may: <ul style="list-style-type: none"> • Engage in social pretend play with one or two friends (for example, pretend to be a dog while a friend pretends to be the owner). (24–30 mos.; Howes 1987, 261) • Express an interest in playing with a particular child. (13–24 mos.; Howes et al. 1988, 3)

Foundation: Identity of Self in Relation to Others

The developing concept that the child is an individual operating within social relationships

8 months	18 months	36 months
At around eight months of age, children show clear awareness of being a separate person and of being connected with other people. Children identify others as both distinct from and connected to themselves. (Fogel 2001, 347)	At around 18 months of age, children demonstrate awareness of their characteristics and express themselves as distinct persons with thoughts and feelings. Children also demonstrate expectations of others' behaviors, responses, and characteristics on the basis of previous experiences with them.	At around 36 months of age, children identify their feelings, needs, and interests, and identify themselves and others as members of one or more groups by referring to categories. (24–36 mos.; Fogel 2001, 415; 18–30 mos.)
For example, the child may:	For example, the child may:	For example, the child may:
<ul style="list-style-type: none"> Respond to someone who calls her name. (5–7 mos.; Parks 2004, 94; 9 mos.; Coplan 1993, 2) Turn toward a familiar person upon hearing his name. (6–8 mos.; Parks 2004, 94; 8 mos.; Meisels et al. 2003, 18) Look at an unfamiliar adult with interest but show wariness or become anxious when that adult comes too close. (5–8 mos.; Parks 2004; Johnstone and Scherer 2000, 222) Wave arms and kick legs when a parent enters the room. Cry when the favorite infant care teacher leaves the room. (6–10 mos.; Parks 2004) 	<ul style="list-style-type: none"> Point to or indicate parts of the body when asked. (15–19 mos.; Parks 2004) Express thoughts and feelings by saying “no!” (18 mos.; Meisels et al. 2003) Move excitedly when approached by an infant care teacher who usually engages in active play. 	<ul style="list-style-type: none"> Use pronouns such as <i>I, me, you, we, he, and she</i>. (by 36 mo.; American Academy of Pediatrics 2004, 307) Say own name. (30–33 mos.; Parks 2004, 115) Begin to make comparisons between self and others (for example, communicate, “_____ is a boy/girl like me”). Name people in the family. Point to pictures of friends and say their names. Communicate “Do it myself!” when the infant care teacher tries to help.

Behaviors leading up to the foundation (4 to 7 months)	Behaviors leading up to the foundation (9 to 17 months)	Behaviors leading up to the foundation (19 to 35 months)
<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Use hands to explore different parts of the body. (4 mos.; Kravitz, Goldenberg, and Neyhus 1978) • Examine her own hands and a parent's hands. (scaled score of 9 for 4:06–4:15 mos.;* Bayley 2006, 53) • Watch or listen for the infant care teacher to come to meet the child's needs. (birth–8 mos.; Lerner and Dombro 2000, 42) 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Play games such as peekaboo or run-and-chase with the infant care teacher. (Stern 1985, 102; 7–11 mos.; Frankenburg 1990) • Recognize familiar people, such as a neighbor or infant care teacher from another room, in addition to immediate family members. (12–18 mos.; Parks 2004) • Use names to refer to significant people (for example, Mama to refer to the mother and Papa to refer to the father). (11–14 mos.; Parks 2004, 109) 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Recognize his own image in the mirror and understand that it is himself. (Siegel 1999, 35; Lewis and Brooks-Gunn 1979, 56) • Know the names of familiar people, such as a neighbor. (by end of second year; American Academy of Pediatrics 2004, 270) • Show understanding of or use words such as <i>you</i>, <i>me</i>, <i>mine</i>, <i>he</i>, <i>she</i>, <i>it</i>, and <i>I</i>. (20–24 mos.; Parks 2004, 96; 20 mos.; Bayley 2006; 18–24 mos.; Lerner and Ciervo 2003; 19 mos.; Hart and Risley 1999, 61; 24–20 mos.; Parks 2004, 113) • Use name or other family label (for example, a nickname, birth order, "little sister") when referring to self. (18–24 mos.; Parks 2004; 24 mos.; Lewis and Brooks-Gunn 1979) • Claim everything as "mine." (24 mos.; Levine 1983) • Point to or indicate self in a photograph. (24 mos.; Lewis and Brooks-Gunn 1979) • Proudly show the infant care teacher a new possession. (24–30 mos.; Parks 2004)

Foundation: Recognition of Ability

The developing understanding that the child can take action to influence the environment

8 months	18 months	36 months
At around eight months of age, children understand that they are able to make things happen.	At around 18 months of age, children experiment with different ways of making things happen, persist in trying to do things even when faced with difficulty, and show a sense of satisfaction with what they can do. (McCarty, Clifton, and Collard 1999)	At around 36 months of age, children show an understanding of their own abilities and may refer to those abilities when describing themselves.
For example, the child may:	For example, the child may:	For example, the child may:
<ul style="list-style-type: none"> • Pat a musical toy to try to make the music come on again. (5–9 mos.; Parks 2004) • Raise arms to be picked up by the infant care teacher. (6–9 mos.; Fogel 2001, 274) • Initiate a favorite game (for example, hold out a foot to a parent to start a game of This Little Piggy). (8 mos.; Meisels et al. 2003; 6–9 mos.; Fogel 2001, 274) • Gesture at a book and smile with satisfaction after the infant care teacher gets it down from the shelf. (8 mos.; Meisels et al. 2003) 	<ul style="list-style-type: none"> • Roll a toy car back and forth on the ground and then push it really hard and let go to see what happens. (18 mos.; McCarty, Clifton, and Collard 1999) • Clap and bounce with joy after making a handprint with paint. (12–18 mos.; Sroufe 1979; Lally et al. 1995, 71) • Squeeze a toy in different ways to hear the sounds it makes. (scaled score of 10 for 13:16–14:15 mos.;* Bayley 2006) • Smile after walking up a steep incline without falling or after carrying a bucket full of sand from one place to another without spilling. • Proudly hold up a book hidden in a stack after being asked by the infant care teacher to find it. 	<ul style="list-style-type: none"> • Communicate “I take care of the bunny” after helping to feed the class rabbit. (18–36 mos.; Lally et al. 1995, 71) • Finish painting a picture and hold it up to show a family member. • Complete a difficult puzzle for the first time and clap or express “I’m good at puzzles.”

Behaviors leading up to the foundation (4 to 7 months)	Behaviors leading up to the foundation (9 to 17 months)	Behaviors leading up to the foundation (19 to 35 months)
<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Try again and again to roll over, even though not yet able to roll completely over. • Grasp, suck, or look at a teething ring. (before 8 mos.; Fogel 2001, 218) • Shake a toy, hear it make noise, and shake it again. • Stop crying upon seeing the infant care teacher approach with a bottle. 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Drop a blanket over the side of the crib and wait for the infant care teacher to pick it up. (12 mos.; Meisels et al. 2003) • Drop a toy truck in the water table and blink in anticipation of the big splash. (12 mos.; Meisels et al. 2003) • Look over a shoulder, smile at the mother, and giggle in a playful way while crawling past her, to entice her to play a game of run-and-chase. (10–14 mos.; Bayley 2006) • Turn light switch on and off repeatedly. 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Insist on zipping up a jacket when the infant care teacher tries to help. (20–28 mos.; Hart and Risley 1999, 62; 24 mos.; Hart and Risley 1999, 122, 129; 20–36 mos.; Bates 1990; Bullock and Lütkenhaus 1988, 1990; Stipek, Gralinski, and Kopp 1990) • Point to a stack of blocks he has made and express “Look” to the infant care teacher. (28 mos.; Hart and Risley 1999, 96) • Communicate “I doing this,” “I don’t do this,” “I can do this,” or “I did this.” (25 mos.; Hart and Risley 1999, 121; Dunn, 1987; Stipek, Gralinski, and Kopp 1990) • Say “I climb high” when telling the infant care teacher about what happened during outside play time, then run outside to show him how. (30 mos.; Meisels et al. 2003)

Foundation: Expression of Emotion

The developing ability to express a variety of feelings through facial expressions, movements, gestures, sounds, or words

8 months	18 months	36 months
At around eight months of age, children express a variety of primary emotions such as contentment, distress, joy, sadness, interest, surprise, disgust, anger, and fear. (Lamb, Bornstein, and Teti 2002, 341)	At around 18 months of age, children express emotions in a clear and intentional way and begin to express some complex emotions, such as pride.	At around 36 months of age, children express complex, self-conscious emotions such as pride, embarrassment, shame, and guilt. Children demonstrate awareness of their feelings by using words to describe feelings to others or acting them out in pretend play. (Lewis et al. 1989; Lewis 2000b; Lagattuta and Thompson 2007)
For example, the child may:	For example, the child may:	For example, the child may:
<ul style="list-style-type: none"> • Exhibit wariness, cry, or turn away when a stranger approaches. (6 mos.; Lamb, Bornstein, and Teti 2002, 338; Fogel 2001, 297; 7–8 mos.; Lewis 2000a, 277) • Be more likely to react with anger than just distress when accidentally hurt by another child. (later in the first year; Lamb, Bornstein, and Teti 2002, 341) • Express fear of unfamiliar people by moving near a familiar infant care teacher. (8 mos.; Bronson 1972) • Stop crying and snuggle after being picked up by a parent. • Show surprise when the infant care teacher removes the blanket covering her face to start a game of peekaboo. 	<ul style="list-style-type: none"> • Show affection for a family member by hugging. (8–18 mos.; Lally et al. 1995; Greenspan and Greenspan 1985, 84) • Express jealousy by trying to crowd onto the infant care teacher’s lap when another child is already sitting there. (12–18 mos.; Hart et al. 1998) • Express anger at having a toy taken away by taking it back out of the other child’s hands or hitting her. (18 mos.; Squires, Bricker, and Twombly 2002, 115) • Smile directly at other children when interacting with them. (18 mos.; Squires, Bricker, and Twombly 2002, 115) • Express pride by communicating “I did it!” (15–24 mos.; Lewis et al. 1989; Lewis 2000b) 	<ul style="list-style-type: none"> • Hide face with hands when feeling embarrassed. (Lagattuta and Thompson 2007) • Use words to describe feelings (for example, “I don’t like that”). (24–36 mos.; Fogel 2001, 414; 24–36 mos.; Harris et al. 1989; Yuill 1984) • Communicate “I miss Grandma” after talking on the phone with her. (24–36 mos.; Harris et al. 1989; Yuill 1984) • Act out different emotions during pretend play by “crying” when pretending to be sad and “cooing” when pretending to be happy. (Dunn, Bretherton, and Munn 1987) • Express guilt after taking a toy out of another child’s cubby without permission by trying to put it back without anyone seeing. (Lagattuta and Thompson 2007)

Behaviors leading up to the foundation (4 to 7 months)	Behaviors leading up to the foundation (9 to 17 months)	Behaviors leading up to the foundation (19 to 35 months)
<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Get frustrated or angry when unable to reach a toy. (4–6 mos.; Sternberg, Campos, and Emde 1983) • Express joy by squealing. (5–6 mos.; Parks 2004, 125) • Frown and make noises to indicate frustration. (5–6 mos.; Parks 2004, 125) • Be surprised when something unexpected happens. (birth–6 mos.; Lewis 2000a) 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Become anxious when a parent leaves the room. (6–9 mos.; Parks 2004) • Knock a shape-sorter toy away when it gets to be too frustrating. (10–12 mos.; Sroufe 1979) • Show anger when another child takes a toy by taking it back. (10–12 mos.; Sroufe 1979) • Express fear by crying upon hearing a dog bark loudly or seeing someone dressed in a costume. (10 mos.; Bronson 1972) • Express sadness by frowning after losing or misplacing a favorite toy. (9–10 mos.; Fogel 2001, 300) • Smile with affection as a sibling approaches. (10 mos.; Sroufe 1979; Fox and Davidson 1988) • Push an unwanted object away. (12 mos.; Squires, Bricker, and Twombly 2002, 114) 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Communicate “Mama mad” after being told by the mother to stop an action. (28 mos.; Bretherton et al. 1986) • Use one or a few words to describe feelings to the infant care teacher. (18–30 mos.; Bretherton et al. 1986; Dunn 1987) • Express frustration through tantrums. (18–36 mos.; Pruett 1999, 148)

Foundation: Empathy

The developing ability to share in the emotional experiences of others

8 months	18 months	36 months
At around eight months of age, children demonstrate awareness of others' feelings by reacting to their emotional expressions.	At around 18 months of age, children change their behavior in response to the feelings of others even though their actions may not always make the other person feel better. Children show an increased understanding of the reason for another's distress and may become distressed by the other's distress. (14 mos.; Zahn-Waxler, Robinson, and Emde 1992; Thompson 1987; 24 mos.; Zahn-Waxler and Radke-Yarrow 1982, 1990)	At around 36 months of age, children understand that other people have feelings that are different from their own and can sometimes respond to another's distress in a way that might make that person feel better. (24–36 mos.; Hoffman 1982; 18 mos.; Thompson 1987, 135).
For example, the child may:	For example, the child may:	For example, the child may:
<ul style="list-style-type: none"> • Stop playing and look at a child who is crying. (7 mos.; American Academy of Pediatrics 2004, 212) • Laugh when an older sibling or peer makes a funny face. (8 mos.; Meisels et al. 2003) • Return the smile of the infant care teacher. • Grimace when another child cries. (older than 6 mos.; Wingert and Brant 2005, 35) 	<ul style="list-style-type: none"> • Offer to help a crying playmate by bringing his own mother over. (13–15 mos.; Wingert and Brant 2005, 35) • Try to hug a crying peer. (18 mos.; Thompson 1987, 135) • Bring her own special blanket to a peer who is crying. (13–15 mos.; Wingert and Brant 2005, 35) • Become upset when another child throws a tantrum. • Gently pat a crying peer on his back, just like his infant care teacher did earlier in the day. (16 mos.; Bergman and Wilson 1984; Zahn-Waxler et al. 1992) • Hit a child who is crying loudly. • Stop playing and look with concerned attention at a child who is screaming. • Move quickly away from a child who is crying loudly. 	<ul style="list-style-type: none"> • Do a silly dance in an attempt to make a crying peer smile. (24–36 mos.; Dunn 1988) • Communicate “Lucas is sad because Isabel took his cup.” (36 mos.; Harris et al. 1989; Yuill 1984) • Comfort a younger sibling who is crying by patting his back, expressing “It’s okay” and offering him a snack. (Denham 1998, 34) • Communicate “Mama sad” when the mother cries during a movie. (24–36 mos.; Dunn 1994; Harris 2000, 282). • Communicate “Olivia’s mama is happy” and point to or indicate the illustration in the picture book. (24 mos.; Harris 2000, 282). • Get an infant care teacher to help a child who has fallen down and is crying.

Behaviors leading up to the foundation (4 to 7 months)	Behaviors leading up to the foundation (9 to 17 months)	Behaviors leading up to the foundation (19 to 35 months)
<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Cry when hearing another baby cry. (younger than 6 mos.; Wingert and Brant 2005, 35) 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Stand nearby and quietly watch a peer who has fallen down and is crying. • Exhibit social referencing by looking for emotional indicators in others' faces, voices, or gestures to decide what to do when uncertain. (10–12 mos.; Thompson 1987, 129) • Cry upon hearing another child cry. (12 mos.; Meisels et al. 2003, 26) 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Hug a crying peer. (18–24 mos.; Parks 2004, 123) • Become upset in the presence of those who are upset.

Foundation: Emotion Regulation

The developing ability to manage emotional responses, with assistance from others and independently

8 months	18 months	36 months
At around eight months of age, children use simple behaviors to comfort themselves and begin to communicate the need for help to alleviate discomfort or distress.	At around 18 months of age, children demonstrate a variety of responses to comfort themselves and actively avoid or ignore situations that cause discomfort. Children can also communicate needs and wants through the use of a few words and gestures. (National Research Council and Institute of Medicine 2000, 112; 15–18 mos.; American Academy of Pediatrics 2004, 270; Coplan 1993, 1)	At around 36 months of age, children anticipate the need for comfort and try to prepare themselves for changes in routine. Children have many self-comforting behaviors to choose from, depending on the situation, and can communicate specific needs and wants. (Kopp 1989; California Department of Education 2005)

Chart continues on next page.

Emotion Regulation continued

For example, the child may:	For example, the child may:	For example, the child may:
<ul style="list-style-type: none"> • Turn away from an overstimulating activity. (3–12 mos.; Rothbart, Ziaie, and O’Boyle 1992) • Vocalize to get a parent’s attention. (6.5–8 mos.; Parks 2004, 126) • Lift arms to the infant care teacher to communicate a desire to be held. (7–9 mos.; Coplan 1993, 3; 5–9 mos.; Parks 2004, 121) • Turn toward the infant care teacher for assistance when crying. (6–9 mos.; Fogel 2001, 274) • Cry after her hand was accidentally stepped on by a peer and then hold the hand up to the infant care teacher to look at it. • Reach toward a bottle that is up on the counter and vocalize when hungry. • Make a face of disgust to tell the infant care teacher that he does not want any more food. (6–9 mos.; Lerner and Ciervo 2003) • Bump head, cry, and look to infant care teacher for comfort. • Suck on a thumb to make self feel better. • Look at the infant care teacher when an unfamiliar person enters the room. 	<ul style="list-style-type: none"> • Use gestures and simple words to express distress and seek specific kinds of assistance from the infant care teacher in order to calm self. (Brazelton 1992; Kopp 1989, 347) • Use comfort objects, such as a special blanket or stuffed toy, to help calm down. (Kopp 1989, 348) • Seek to be close to a parent when upset. (Lieberman 1993) • Play with a toy as a way to distract self from discomfort. (12–18 mos.; Kopp 1989, 347) • Communicate “I’m okay” after falling down. (National Research Council and Institute of Medicine 2000, 112) • Indicate her knee and say “boo boo” after falling down and gesture or ask for a bandage. • Approach the infant care teacher for a hug and express “Mommy work,” then point to the door to communicate missing the mother. 	<ul style="list-style-type: none"> • Reach for the mother’s hand just before she pulls a bandage off the child’s knee. • Ask the infant care teacher to hold him up to the window to wave goodbye before the parent leaves in the morning. • Show the substitute teacher that she likes a back rub during naptime by patting own back while lying on the mat. • Play quietly in a corner of the room right after drop-off until ready to play with the other children. • Ask the infant care teacher to explain what’s going to happen at the child’s dental appointment later in the day. • Communicate “Daddy always comes back” after saying goodbye to him in the morning.

Behaviors leading up to the foundation (4 to 7 months)	Behaviors leading up to the foundation (9 to 17 months)	Behaviors leading up to the foundation (19 to 35 months)
<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Suck on hands, focus on an interesting toy, or move the body in a rocking motion to calm self. (3–6 mos.; Parks 2004, 10) • Cry inconsolably less often than in the early months. (6 mos.; Parks 2004, 10) • Calm self by sucking on fingers or hands. (4 mos.; Thelen and Fogel 1989; 3–12 mos.; Bronson 2000b, 64) • Be able to inhibit some negative emotions. (later in the first year; Fox and Calkins 2000) • Shift attention away from a distressing event onto an object as a way of managing emotions. (6 mos.; Weinberg et al. 1999) • Fall asleep when feeling overwhelmed. 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Move away from something that is bothersome and move toward the infant care teacher for comfort. (6–12 mos.; Bronson 2000b, 64) • Fight back tears when a parent leaves for the day. (12 mos.; Bridges, Grolnick, and Connell 1997; Parritz 1996; Sroufe 1979) • Look for a cue from the infant care teacher when unsure if something is safe. (10–12 mos.; Fogel 2001, 305; Dickstein and Parke 1988; Hirshberg and Svejda 1990) • Fuss to communicate needs or wants; begin to cry if the infant care teacher does not respond soon enough. (11–19 mos.; Hart and Risley 1999, 77) • Repeat sounds to get the infant care teacher’s attention. (11–19 mos.; Hart and Risley 1999, 79) 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Continue to rely on adults for reassurance and help in controlling feelings and behavior. (Lally et al. 1995) • Reenact emotional events in play to try to gain mastery over these feelings. (Greenspan and Greenspan 1985) • Use words to ask for specific help with regulating emotions. (Kopp 1989) • Express wants and needs verbally (for example, say “Hold me” to the infant care teacher when feeling tired or overwhelmed). (30–31.5 mos.; Parks 2004, 130)

Foundation: Impulse Control

The developing capacity to wait for needs to be met, to inhibit potentially hurtful behavior, and to act according to social expectations, including safety rules

8 months	18 months	36 months
At around eight months of age, children act on impulses. (birth–9 mos.; Bronson 2000b, 64)	At around 18 months of age, children respond positively to choices and limits set by an adult to help control their behavior. (18 mos.; Meisels et al. 2003, 34; Kaler and Kopp 1990)	At around 36 months of age, children may sometimes exercise voluntary control over actions and emotional expressions. (Bronson 2000b, 67)
For example, the child may:	For example, the child may:	For example, the child may:
<ul style="list-style-type: none"> • Explore the feel of hair by pulling it. (4–7 mos.; American Academy of Pediatrics 2004, 226) • Reach for an interesting toy that another child is mouthing. • Reach for another child’s bottle that was just set down nearby. • Turn the head away or push the bottle away when finished eating. (8 mos.; Meisels et al. 2003, 19) 	<ul style="list-style-type: none"> • Stop drawing on the wall when a parent asks. (18 mos.; Meisels et al. 2003) • Choose one toy when the infant care teacher asks “Which one do you want?” even though the child really wants both. • Express “no no” while approaching something the child knows she should not touch because the infant care teacher has communicated “no no” in the past when the child tried to do this. • Look to the infant care teacher to see his reaction when the child reaches toward the light switch. • Stop reaching for the eyeglasses on the infant care teacher’s face when she gently says “no no.” (scaled score of 10 for 7:16–8:15 mos.; Bayley 2006, 87; 12 mos.; Meisels et al. 2003, 27) 	<ul style="list-style-type: none"> • Jump up and down on the couch but stop jumping and climb down when a parent enters the room. (36 mos.; Meisels et al. 2003) • Experience difficulty (for example, cry, whine, pout) with transitions. (30–36 mos.; Parks 2004, 320) • Begin to share. • Handle transitions better when prepared ahead of time or when the child has some control over what happens. • Touch a pet gently without needing to be reminded. • Wait to start eating until others at the table are also ready.

Behaviors leading up to the foundation (4 to 7 months)	Behaviors leading up to the foundation (9 to 17 months)	Behaviors leading up to the foundation (19 to 35 months)
<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Cry when hungry or tired. • Fall asleep when tired 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Crawl too close to a younger infant lying nearby. • Refrain from exploring another baby's hair when reminded to be gentle. (8–10 mos.; Brazelton 1992, 256) • Look at the infant care teacher's face to determine whether it is all right to play with a toy on the table. (12 mos.; Meisels et al. 2003, 25) • Bite another child who takes a toy. • Reach for food on a plate before the infant care teacher offers it. (12 mos.; Meisels et al. 2003, 25) 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Begin to use words and dramatic play to describe, understand, and control impulses and feelings. (Lally et al. 1995) • Communicate "mine!" and take a doll out of the hands of a peer. (23–24 mos.; Parks 2004, 330) • Throw a puzzle piece on the floor after having trouble fitting it in the opening. (24 mos.; Meisels et al. 2003) • Open the playground door and run out, even after being asked by the infant care teacher to wait. (24 mos.; Meisels et al. 2003) • Start to take another child's toy, then stop after catching the eye of the infant care teacher. (24 mos.; Meisels et al. 2003) • Use a quiet voice at naptime. (30 mos.; Meisels et al. 2003) • Understand and carry out simple commands or rules. (Bronson 2000b, 85) • Have a tantrum rather than attempt to manage strong feelings. (Brazelton 1992) • Be able to wait for a turn.

Foundation: Social Understanding

The developing understanding of the responses, communication, emotional expressions, and actions of other people

8 months	18 months	36 months
At around eight months of age, children have learned what to expect from familiar people, understand what to do to get another's attention, engage in back-and-forth interactions with others, and imitate the simple actions or facial expressions of others.	At around 18 months of age, children know how to get the infant care teacher to respond in a specific way through gestures, vocalizations, and shared attention; use another's emotional expressions to guide their own responses to unfamiliar events; and learn more complex behavior through imitation. Children also engage in more complex social interactions and have developed expectations for a greater number of familiar people.	At around 36 months of age, children can talk about their own wants and feelings and those of other people, describe familiar routines, participate in coordinated episodes of pretend play with peers, and interact with adults in more complex ways.
For example, the child may:	For example, the child may:	For example, the child may:
<ul style="list-style-type: none"> • Smile when the infant care teacher pauses in order to get her to continue playing peekaboo or pat-a-cake. • Squeal in anticipation of the infant care teacher's uncovering her eyes during a game of peekaboo. • Learn simple behaviors by imitating a parent's facial expressions, gestures, or sounds. • Try to get a familiar game or routine started by prompting the infant care teacher. • Quit crying upon realizing that the infant care teacher is approaching. 	<ul style="list-style-type: none"> • Gesture toward a desired toy or food while reaching, making imperative vocal sounds, and looking toward the infant care teacher. • Seek reassurance from the infant care teacher when unsure about something. • Vary response to different infant care teachers depending on their play styles, even before they have started playing (for example, get very excited upon seeing an infant care teacher who regularly plays in an exciting, vigorous manner). • Engage in back-and-forth play that involves turn-taking, such as rolling a ball back and forth. • Look in the direction of the infant care teacher's gesturing or pointing. • Learn more complex behaviors through imitation, such as watching an older child put toys together and then doing it.) 	<ul style="list-style-type: none"> • Name own feelings or desires, explicitly contrast them with another's, or describe why the child feels the way he does. • Describe what happens during the bedtime routine or another familiar everyday event. • Move into and out of pretend play roles, tell other children what they should do in their roles, or extend the sequence (such as by asking "Wanna drink?" after bringing a pretend hamburger to the table as a waiter). • Help the infant care teacher search for a missing toy. • Talk about what happened during a recent past experience, with the assistance of the infant care teacher. • Help the infant care teacher clean up at the end of the day by putting the toys in the usual places.

Behaviors leading up to the foundation (4 to 7 months)	Behaviors leading up to the foundation (9 to 17 months)	Behaviors leading up to the foundation (19 to 35 months)
<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Make imperative vocal sounds to attract the infant care teacher's attention. • Participate in playful, face-to-face interactions with an adult, such as taking turns vocalizing. 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Follow the infant care teacher's gaze to look at a toy. • Hold up or gesture toward objects in order to direct the infant care teacher's attention to them. 	<p>During this period, the child may:</p> <ul style="list-style-type: none"> • Vary play with different peers depending on their preferred play activities. • Imitate the behavior of peers as well as of adults.

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