

Teacher Interactions With Infants and Toddlers

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SMALL GROUPS, FEW INFANTS AND TODDLERS assigned to each teacher, and uncrowded spaces with sufficient room for everyone to move around are agreed upon as characteristics of high-quality infant and toddler programs by organizations such as Early Head Start, the National Association for the Education of Young Children (NAEYC), and Zero to Three. Classroom quality, however, extends beyond satisfying these structural features. It also includes warm, meaningful interactions between teachers and babies. A growing body of research suggests that responsive early relationships shape the architecture of the brain, form the foundation for healthy social and emotional development, and foster language development (National Scientific Council on the Developing Child 2004; Hoff 2006; Thompson 2008).

When Mary McMullen published a Research in Review article on infant and toddler best practices in *Young Children* (1999), she noted that the quality of structural elements such as group size, teacher-to-child ratio, and teacher qualifications, were measurable and could be regulated. On the other hand, process quality, that is to say the quality of environmental aspects closely experienced by the child, such as play with materials and teacher-child interactions, was less so. However, this distinction has blurred with the advent of tiered quality rating and improvement systems (TQRIS), standards and criteria for NAEYC Accreditation of Programs for Young Children (NAEYC 2008), and Early Head Start Performance Standards, all of which establish guidelines for process quality in infant and toddler settings. Accompanying these new guidelines for process quality are increased federal and state investments in high-quality infant and toddler care (Cohen et al. 2009; HHS 2014). Present emphasis on the role of teacher-child interactions in determining quality makes it important and timely to develop a deeper understanding of the research base for teacher-child interactions with infants and toddlers.

The PPCT model of development

Healthy development of infants and toddlers is dependent on their individual characteristics and the responses of primary caregiving adults, in conjunction with the contexts and systems in which interactions occur. The Process-Person-Context-Time (PPCT) model of development (Bronfenbrenner & Morris 2006)—the elements of which are described below—provides a

framework for organizing this review of research.

Repeated patterns of regularly occurring, responsive, and sensitive interactions of adult caregivers with children are called *proximal processes*. Proximal processes serve as the primary mechanism for children's developmental change and growth. Three types of caregiver-child interactions, or proximal processes, have received the most attention in the early childhood research literature in recent years: building relationships between teachers and very young children and between very young children and their peers; fostering cognitive development and learning in the context of play; and encouraging language and literacy development through conversations and book reading.

Parents, caregivers, and program administrators are the *persons* most proximal, or closest, to infants and toddlers during the early years. Infants and toddlers development occurs in two primary *contexts*—the family, and the early care and education settings chosen by the family. Systems of support, such as professional development for caregivers or home visiting programs for parents, can provide an array of resources for the adults in these contexts (Britto, Yoshikawa, & Boller 2011). In the case of infant and toddler teachers, such professional development might include informal workshops, trainings, or coursework within the formal higher education system (Hyson, Horm, & Winton 2012).

These contexts and systems of support operate within a broader early childhood policy context that has seen tremendous change over the past 20 years. Since the beginning of the twenty-first century states have developed early learning guidelines for infants and toddlers and identified core knowledge and competencies for the workforce in infant and toddler settings (Zero to Three 2010). During this same time period, quality rating and improvement systems were created that raised standards of program quality for early care and education settings serving infants and toddlers (Zero to Three 2008b). The PPCT model has the ability to account for the growth and change of persons and their contexts, settings, and systems over time.

Time within the PPCT model includes examining the long-term impact on later development of interactions experienced during infancy and toddlerhood. For example, a study of 3,000 infants and toddlers by Vogel and colleagues (2013) found that at age 5, Early Head Start attendees had fewer behavioral problems and were

more engaged in learning than children in a control group who were eligible but did not attend Early Head Start. These differences were even stronger for the children who attended Early Head Start from birth to age 3, followed by a formal preschool program from 3 to 5 years of age (Chazan-Cohen & Kisker 2013).

The nature of proximal processes

Regardless of the type of interactions studied—building relationships, fostering cognitive development, or encouraging language development—it is the quality of the interactions, the way the teacher responds and engages, that matters most. Sensitive-responsive interactions support the growth and development of infants and toddlers while intrusive-controlling interactions impede developmental trajectories (Burchinal & Cryer 2003; Loeb et al. 2004). Sensitive and responsive interactions are demonstrated when teachers respond promptly to the social overtures of infants and toddlers, such as when a teacher warmly coos back to the cooing infant in her arms. The teacher’s responsive coos, eye contact, and mirroring of the infant’s smile provide an engaging back-and-forth dialogue. On the other hand, intrusive interactions—those interactions that interrupt the infant’s activity—are often driven by the needs and interests of the adult and are disruptive to the infant or toddler.

Despite the recognition of the importance of responsive and warm adult responses, some studies suggest babies in infant and toddler classrooms do not experience consistent, positive interactions. In a study of early child care classrooms, the NICHD (HHS 2006) reported that the percentage of classrooms characterized as having high-quality interactions ranged from a high of 18 percent for 1-year-olds to only 6 percent for 3-year-olds.

Child outcomes of teacher–child interactions

Sensitive-responsive interactions between teachers and infants and toddlers have been associated with numerous positive outcomes, including increases in the following:

- Social skills (Burchinal & Cryer 2003; Loeb et al. 2004; Shin 2010)
- Receptive language (Burchinal & Cryer 2003; HHS 2006)
- Expressive language (Girolametto et al. 2000)
- Early literacy engagement and ability (Loeb et al. 2004)
- School readiness concepts, such as colors and shapes (Burchinal & Cryer 2003)

Researchers in the NICHD *Study of Early Child Care* (HHS 2006) also reported that infants and toddlers who experienced sensitive interactions in child care throughout their first three years exhibited fewer behavior problems in preschool classrooms at age 3. Specifically, they showed more compliance and fewer negative behaviors during laboratory studies of mother–child interaction. (See “Implications for Early Childhood Professionals.”)

Researchers have also looked at what happens in the absence of sensitive care, as well as situations in which the care is actually insensitive to the needs and interests of infants and toddlers. Intrusive-controlling interactions

between teachers and very young children have been associated with the following negative outcomes:

- Lower scores on a measure of cognitive ability (Klein & Feldman 2007)
- Smaller expressive vocabulary (Girolametto et al. 2000)
- More negative peer interactions (HHS 2006)

Sensitivity during personal care routines

Sensitive-responsive interactions can easily be imbedded in the numerous personal care opportunities that arise daily in infant and toddler classrooms. For instance, sensitive teachers acknowledge and label a child’s feelings throughout the day, by commenting on an infant’s feelings of sadness as a parent prepares to leave in the morning or their sleepiness at naptime. Positive interactions can occur throughout the day, for example, by having playful exchanges with a child during diaper changing times or while waiting for a parent to arrive at the end of the day. Looking into an infant’s eyes and talking in soothing tones while holding the infant during bottlefeeding can communicate powerful messages of connectedness and acceptance.

Implications for Early Childhood Professionals

Teachers

- Examine personal beliefs about the development and learning of infants and toddlers
- Engage in ongoing professional development to inform beliefs and practices for working with infants and toddlers
- Improve observational skills to recognize opportunities to sensitively respond to the language and learning of infants and toddlers

Program Directors

- Provide appropriate professional development opportunities for teachers to improve their interaction and observation skills
- Support group sizes and ratios that encourage sensitive, responsive teacher–child interactions
- Foster parent–teacher communication to help program staff learn more about each child’s individual personality and communication style

Coaches and Instructors

- Encourage teachers to reframe personal care routines as a time for one-on-one interactions rather than a task
- Provide opportunities for teachers to intentionally reflect on their personal beliefs and link new information to their interactions with infants and toddlers
- Provide strategies that help teachers create language-rich environments during sensitive and responsive teacher–child interactions

Given the frequency of caregiving events in an infant and toddler setting, it is disappointing that researchers find only limited talk and interaction occurring during routine times (de Schipper, Riksen-Walraven, & Geurts 2007; Klein & Feldman 2007; Hallam et al. 2009; Albers, Riksen-Walraven, & de Weerth 2010; Degotardi 2010; Gooch & Powell 2012). For instance, Degotardi (2010) observed that during routines teachers appeared much more focused on addressing children's basic needs and completing tasks quickly than on using the time for one-on-one interaction with infants and toddlers. Gooch and Powell (2012) noted that adult talk during routine caregiving was more likely to be limited to giving the child instructions and directing their behavior to finish the job at hand. The researchers offered some reasons for low levels of talking with babies during routines, including embarrassment or self-consciousness on the part of teachers; teachers not having role models for ways to interact during care routines; and a lack of teacher awareness of the importance of sensitive interactions for healthy development of infants and toddlers.

Sensitivity during play

Degotardi (2010) found that teachers were likely to engage in more sensitive-responsive interactions with infants and toddlers during playtime than during routine caregiving activities. This was especially true for teachers who recognized the link between their interactions and infant and toddler behavior and development. Degotardi asked teachers to interpret what was happening while they watched a videotape of their interactions with infants during playtime. Teachers who were able to explain how and what infants learned during play were more likely to engage in more sensitive interactions with the babies during play. Jung's (2013) three-month observational study of three teachers during playtime identified several important ways in which the teachers facilitated toddlers' social and language abilities. By closely observing the toddlers, the teachers were able to interpret their communication efforts and attempts to be social and, thus, respond appropriately by engaging with them in play or modeling ways to play. Further, when necessary, sensitive teachers were able to resolve conflicts between toddlers during play.

The NICHD researchers (HHS 2000a) have also found that stimulating play environments with engaging materials and activities support teachers' sensitive-responsive interactions. McMullen (2010) noted, however, that the provision of play materials alone does not encourage infants' play. Sensitive teachers need to be in tune with the developmental needs and abilities of infants and toddlers and encourage interaction with play materials. For example, Jung (2013) noted that teachers showed sensitivity by providing physical support during play, such as moving a toy closer, lifting toddlers up to reach something they needed, or carrying infants to the toys they desired.

Teachers can also model how to play with a toy, like rolling a ball toward a toddler, which often invites infants and toddlers to join in the play. Jung (2013) observed that when a teacher noticed 15-month-old Isabel not engaged in play, the teacher began to model different ways to tap on

a drum. Isabel stopped walking around, took notice, and began to mimic the teacher's tapping. An extended game of back-and-forth drum play ensued as a result of the teacher's "proactive engagement, sensitivity, and understanding of the infant's (emerging) interest" (191).

Describing a toddler's play with a toy or object encourages the child to try out new materials and contributes to listening and receptive language development. Jung (2013) recounts how 15-month-old Matt sat quietly in a large wooden box until his teacher began to describe what he was doing: "Emily said pleasantly, 'Matt, you perfectly fit in that box!' Matt smiled at her and climbed over the box as if he wanted to hear more from Emily" (191). Matt continued to move in and around the boxes as Emily provided a running commentary of his actions.

Personal characteristics

In the PPCT model of development, the quality and quantity of interactions are influenced by characteristics of both child and teacher. Characteristics of a child, such as age and temperament, can encourage or discourage responses from adults. In turn, teachers' beliefs about infants' and toddlers' needs and about their role as teacher influence their interactions with children. Research has examined the impact on interactions of various characteristics of infants and toddlers and their teachers.

Characteristics of infants and toddlers

Both longitudinal (same children at different ages over time) and cross-sectional (different children at different ages at the same time) research studies have found that the nature of teacher-child interactions changes as infants and toddlers get older (Girolametto et al. 2000; Klein & Feldman 2007; Gevers Deynoot-Schaub & Riksen-Walraven 2008; Degotardi 2010). In a longitudinal comparison study, Gevers Deynoot-Schaub and Riksen-Walraven (2008) examined teacher interactions with the same toddlers at 15 months and then again at 23 months. They noted that while 58 percent of the teachers were rated as sensitively responsive when the children were 15 months old, 85 percent were found to be sensitive when the children were 23 months old. Thus, the researchers found teachers demonstrating more sensitive responsiveness as the toddlers aged.

In fact, for the 23-month-old group, positive teacher interactions were significantly higher in the five categories of interactions that Gevers Deynoot-Schaub and Riksen-Walraven rated in their study. The categories included offering a supportive presence; respecting children's autonomy; setting appropriate structure and limits; engaging in higher-quality instruction; and expressing anger or hostility toward children. These results echoed Degotardi's (2010) finding that older infants receive higher levels of teacher sensitivity than younger ones during routine care. Researchers speculate that higher sensitivity of teachers as children age is related to the children's increased language, cognitive, and motor skills, helping them better express their needs and preferences and making it easier for teachers to engage with them. For example, sometime between 9 and 15 months of age toddlers develop the ability to focus on both a toy and their play partner at the same time (Adamson, Bakeman, & Deckner 2004),

making it possible for the toddler to keep playing with the toy while inviting the teacher into a conversation about the toy.

Developmental changes are highly individualized, dependent upon the unique characteristics of each child as well as the child's particular life experiences. For example, Lee (2006) noted that relationship development was easier when infant and teacher personalities or temperaments meshed. However, relationship development required more intentionality on the part of the teacher when personalities were mismatched. In some classrooms, fussy, unpredictable toddlers experienced fewer and less-sensitive caregiving interactions with their teachers (Klein & Feldman 2007). Focused observations can help teachers understand each child's unique style of interacting with the world while individualizing their responsive interactions with children during both play and routine caregiving opportunities (Tanyel & Knopf 2011).

Characteristics of teachers

Teachers' beliefs about the nature of infants and toddlers and how to teach this age group influence teachers' interactions with the children in their care (HHS 2000b; McMullen et al. 2009; McMullen 2010). Consequently, the quality of care experienced by infants and toddlers is highly dependent upon the nature of teachers' beliefs and fundamental understanding of appropriate caregiving interactions. For instance, Degotardi and Sweller (2012) found that teachers who believe infants and toddlers play an active role in their own learning and their sense making of the world engage in sensitive interactions and provide more cognitive stimulation during both play and routine caregiving. McMullen (2010) noted that teachers' mistaken beliefs and resulting practices can create negative—or, at best, neutral—experiences for very young children. For example, in a behaviorist classroom, crying babies were not picked up until they stopped crying on their own for two to three minutes because the teachers did not want to reinforce what they saw as negative behavior.

The match between teachers' beliefs about what is appropriate in the care of very young children and how they engage with them appears to have direct implications for the nature and quality of care. For instance, all of the teachers participating in a study by Brownlee and colleagues (2009) indicated it was important to provide emotionally supportive environments, and as a result, they engaged in warm, sensitive, affectionate, and nonintrusive interactions with the children. On the other hand, fewer than half the teachers noted the importance of offering programming to support learning and cognitive development. Teachers who believed it was important to support both cognitive and emotional development engaged in more activities to support learning and development than teachers who did not rate both as important. For example, the teachers who valued both areas of development offered planned activities during playtime, and looked for teachable moments as they occurred naturally during play, to encourage children's learning.

Characteristics of settings

The PPCT model recognizes that teacher-child interactions (proximal processes) occur within contexts such as family

child care homes and classrooms in child care centers. Features of these contexts, including group size and caregiver-child ratio, influence the nature and frequency of interactions. Researchers have examined the impact of various features of the social context of classrooms, including the group size, teacher-to-child ratio, number of adults, and the age mix of children.

Ratio, group size, and sensitive interactions

In our review of studies that examined the characteristics of settings, most found that both higher teacher-to-child ratios and smaller group sizes were associated with more sensitive interactions (e.g., HHS 2006; Leach et al. 2008; Thomason & La Paro 2009; Jamison et al. 2014). In one study, however, better ratios were not significantly related to sensitive interactions between teachers and children; rather, it was the number of adults in the classroom that mattered (Goelman et al. 2006). Teachers in settings with more than one adult, regardless of the adult-to-child ratio, provided more sensitive interactions with infants and toddlers. Higher ratings of teacher sensitivity have also been observed in settings with fewer children under the age of 2 (de Schipper et al. 2007). Thus, the ability to engage in sensitive interactions with children is influenced by the age range of the children in the group, as well as the total number of children and adults present. These findings make intuitive sense, as most interactions and caregiving routines in infant and toddler classrooms are individualized and the younger the children, the more care they need. A minimum of two adults in a setting allows one adult to attend to the needs of individual children while the other adult interacts with the group.

The exact number of adults needed in a classroom is determined by the size of the group, the needs of the children, and the role of the adults. Having too many adults can be as much of a problem as too few. McMullen (pers. comm.) found that in some settings, such as university laboratory schools, there are sometimes too many adults present; in addition to the teachers and their assistants, student teachers, interns, and community volunteers are often added to the group. In these situations, in addition to the threat of crowding in what may be a small space, adults sometimes interact more with each other than with the children or are overly intrusive with infant and toddlers who need more time to work out challenges on their own. In addition, busy lead teachers find their attention torn between managing the adults in the room and focusing on the needs of the children.

Ratio, group size, and child outcomes

Teachers are better able to establish secure attachment relationships with individual infants and toddlers in classrooms with optimal group sizes and ratios (Ahnert, Pinquart, & Lamb 2006). Research shows that children are able to form secure attachment relationships both with parents and with other adult caregivers (Ahnert, Pinquart, & Lamb 2006), and both types of relationships are important to children's development. De Schipper, Tavecchio, and van Ijzendoorn (2008) found that teachers' positive interactions with infants and toddlers helped foster secure attachments. Securely attached

infants and toddlers see teachers as a source of comfort when distressed and use teachers as a secure base for exploration. In addition, they see themselves as capable individuals and view the world as a supportive place. Secure attachments formed during the first three years provide the foundation for healthy interactions and relationships throughout childhood and into adulthood (Berk 2012).

Language abilities for infants and toddlers emerge and are supported through interactions in the close relationships that form in settings with smaller group sizes and appropriate ratios. Thomason and La Paro (2009) found more language modeling by teachers in classrooms with smaller groups and better ratios. Language modeling was related to the quality and quantity of teacher talk with the children as well as to the teachers' use of language-supporting strategies, such as engaging in conversations with infants and toddlers, asking them open-ended questions, and repeating or extending their talk. Use of these strategies is important because the quality of the language environment experienced by infants and toddlers impacts their language abilities at age 3 (Hoff 2006).

The social context of child care programs, including group size, ratio, number of adults, and age range of the children, appears to influence the quality as well as quantity of teacher-child interactions. Researchers from NICHD noted that "when caregivers cared for a smaller number of children, they showed more positive (or sensitive) caregiving, which in turn, was associated with better outcomes" for the children (HHS 2006, 11). More research is needed, however, to identify the specific teacher behaviors that are supported by smaller group sizes and better ratios, in order to better target mentoring, coaching, and professional development efforts.

Policy context and teacher sensitivity

Ratios and group sizes in classrooms are often tied to the program standards used by child care settings and there is evidence that standards and regulations do make a difference. In many states, child care licensing standards allow larger group sizes and more children per teacher than recommended by national accreditation standards such as those developed by NAEYC and states' tiered quality rating systems (NACCRRRA 2011). Higher levels of teacher sensitivity have been observed in programs rated as high quality within state quality rating systems (Thomason & La Paro 2009; Elicker, Ruprecht, & Anderson 2014) and NAEYC-accredited programs (de Schipper et al. 2007). In addition, teachers have demonstrated better language modeling in child care programs in states with more rigorous licensing requirements (Thomason & La Paro 2009).

Supporting relationship-based care for infants and toddlers

Smaller group sizes and better teacher-child ratios enable teachers to spend more time with individual children and build stronger, more positive relationships. Classroom practices such as continuity of care and primary caregiving, in conjunction with program policies that support smaller group sizes and fewer children per adult, are recognized as the cornerstone of effective relationship-based interactions with infants and toddlers (Early Head Start National

Resource Center 2004; Zero to Three 2008a; Copple et al. 2013). The importance of strong relationships between very young children and their teachers cannot be overstated, as social, emotional, and language development are fostered through interactions in these relationships (National Scientific Council on the Developing Child 2004).

Observing and interpreting the emotions, social overtures, and communication attempts of infants and toddlers requires adults who are tuned in to the individual styles of very young children. This knowledge is acquired over time and through the formation of close, positive relationships, needs that are supported by two frequently recommended practices for the infant and toddler fields—continuity of care and the assignment of primary (or key) teachers (Early Head Start National Resource Center 2004; Zero to Three 2008a; Copple et al. 2013). Continuity of care practices help "infants and toddlers remain with the same teacher(s) during a significant part, if not all, of their first years in a program" (Cryer, Hurwitz, & Wolery 2000, 498). Primary caregivers are assigned principle, but not exclusive, responsibility for a small group of infants and toddlers within a classroom (Bernhardt 2000).

Continuity of care

Continuity of care has been shown to benefit all participants—children, teachers, and families. Studies have found infants and toddlers more likely to form secure attachment relationships with teachers the longer they stayed together (Raikes 1993; Ahnert, Pinguart, & Lamb 2006). Raikes (1993) reported that 91 percent of the 23 infants and toddlers who had been with their teachers for more than one year exhibited secure attachments, as compared to only 50 percent of 20 children with their teachers for five to eight months. In a study by McMullen and colleagues (in press), teachers reported that continuity allowed them to develop more in-depth knowledge of individual infants and toddlers, and that both families and teachers reported the extended period of time together promoted positive working partnerships in the infants' and toddlers' care.

Programs use a variety of strategies to support continuity of care, including keeping groups together in the same room for several years and moving teachers and children together to a new room, as needed (Cryer, Hurwitz, & Wolery 2000). Multiage groups of infants and toddlers also support the implementation of continuity of care because classroom changes are not made when a child learns to crawl or has a birthday (2000). Ackerman (2008) reported that successful implementation of continuity of care practices required teachers to be intentional in their observations of children and in noting changes in their behaviors and abilities. However, teachers' observational skills were not necessarily intuitive and had to be intentionally developed by an onsite coach meeting regularly with them to discuss and interpret what the teachers observed. Ackerman (2008) noted that, in addition to developing better observational skills, teachers new to the practice of continuity of care needed help understanding the developmental abilities of the different age ranges present in their classrooms.

Primary caregiving

The use of primary (or key) teachers for a small subset of children within a classroom is considered a component of quality assurance with infants and toddlers (Early Head Start National Resource Center 2004; Zero to Three 2008a; Copple et al. 2013). Primary caregivers become the emotional anchor for the children in their care and form strong relationships with the children and their families. These relationships, in turn, serve as starting points for responsive interactions stemming from the interests and abilities of the children. Secure attachment relationships emerge from responsive interactions between teachers and very young children and form the basis for later success from the preschool years through adulthood (Sroufe 2005). Sroufe found that children who form secure attachments with significant adults during their first three years have greater self-confidence and self-esteem during the preschool years as well as stronger leadership skills throughout elementary and high school; and further, that securely attached infants and toddlers moved from preschool into their school years and on into adulthood with stronger social skills and less social isolation than children with insecure attachments to primary caregivers. Professional development is one strategy for supporting teachers in their developmentally supportive interactions with infants and toddlers (HHS 2012).

Professional development of infant and toddler teachers

There have been repeated calls by professional organizations and researchers to increase early childhood teachers' overall educational level as well as their preparation specific to the care of infants and toddlers (Norris 2010). Research has shown teachers with more education and specialized training engage in more sensitive interactions with infants and toddlers (de Kruif et al. 2000; HHS 2006; Thomason & La Paro 2009). Because many teachers enter higher education programs with years of classroom experience, teacher education programs need to provide opportunities that build on teachers' previous or current experiences with infants and toddlers in early care and education settings (Brownlee & Berthelsen 2006; Ota et al. 2006). As previously discussed, professional development opportunities need to focus on the importance of effective interaction and communication skills that foster engagement with very young children (Klein & Feldman 2007; Degotardi 2010). In addition, preservice and in-service professional development should help teachers develop the unique knowledge, skills, and dispositions required for work with infants, toddlers, and their families.

In a study of 25 infant and toddler room practitioners, Goouch and Powell (2012) found that the teachers made changes in their practices with infants and toddlers as their images of themselves as professionals evolved. Changes in professional image emerged from relationship-based professional development in which teachers were provided repeated opportunities to talk about their role as teacher, the infants and toddlers in their care, and their practices in their particular settings. As the teachers came to value themselves and their work more, they talked and interacted more with the infants and toddlers in their care.

Because of the strong link between teachers' beliefs and their interactions with infants and toddlers, teacher education programs should provide opportunities for students to examine their beliefs throughout their education. Challenging beliefs and impacting teacher-child interactions is difficult; however, research has shown that teachers' beliefs become better articulated and more informed by research and theory after participating in teacher education programs (La Paro, Siepak, & Scott-Little 2009; Caudle & Moran 2012). Degotardi (2010), for example, found that teachers with a more detailed and coherent framework for how children develop engaged in more sensitive interactions with toddlers in both caregiving and play contexts. The use of videotape, self-reflection, and discussion with peers can help participants in professional education programs grow in their ability to describe and incorporate a framework for action (Fisher & Wood 2012; Goouch & Powell 2012).

Effective professional development, both preservice and in-service, also highlights curricula and models of practice that support sensitive adult-child interactions as the key element of infant and toddler programs. In their review of three major infant and toddler curricula, Horm, Goble, and Branscomb (2012) noted that most emphasize respectful, relationship-based, child-centered approaches. Different curricula emphasize different aspects of care, and infant and toddler teachers and their coworkers should explore various approaches to find a good fit. It is important for teachers to adopt research-informed practices that support their own beliefs, personalities, and unique styles of interacting with infants and toddlers. Although the current research base is too limited to adequately address the effectiveness of specific approaches (Horm, Goble, & Branscomb 2012), infant and toddler teachers can feel confident using curricula that emphasize social-emotional development as the basis of their daily practices.

Conclusion

Sensitive and responsive teacher interactions are needed to build secure and trusting relationships, foster cognitive development, and encourage language development with infants and toddlers. These interactions and relationships are needed for children's healthy social and emotional development and well-being. Research also shows that characteristics of teachers and children, settings, and systems of support influence the nature of interactions during care that can facilitate, be neutral in, or, in the worst cases, actually thwart children's growth, development, and learning. Although current research provides some insights, more remains to be learned about the complexity of supportive care for infants and toddlers within early care and education contexts.

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