

CHAPTER 8

Development of Self, Relationships, and Socioemotional Competence

Foundations for Early School Success

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What are the foundational skills that contribute to school readiness and early academic success? This question has been at the heart of public discussion of early achievement for more than a decade. As national attention has focused on how the achievement gap in cognitive and linguistic skills emerges surprisingly early, and as public policy has increasingly focused on standards-based accountability in schools, understanding the determinants of early school success has become increasingly important. From the beginning of this national discussion, educators and researchers have recognized that social and emotional skills are central to early school achievement.

The National Education Goals Panel (1997) was inaugurated in the 1990s, with the national consensus that school children in the United States were poorly prepared for the scientific and technological challenges of the future. In urging that, by the year 2000, “all children shall enter school ready to learn,” the Panel outlined five dimensions of school readiness based on the child’s (1) health and physical development, (2) emotional well-being and social competence, (3) approaches to learning, (4) communication skills, and (5) cognition and general knowledge. Building on this effort, a consortium of 17 states created the National School Readiness Indicators Initiative (2005) to identify assessments of school readiness that could be used for policymaking and evaluation purposes. Their core readiness indicators comprised six domains—children, families, communities, health services, early care and education, and schools—to emphasize that school readiness is a characteristic of not only young children but also the social systems that surround the child. Within the child domain, indicators of school readiness focused on the child’s physical well-being and motor development, social and emotional development, approaches to learning, language development, and cognition and general

knowledge. In these two important national initiatives and in other ways, school readiness has been perceived as a function of not only cognitive skills but also socioemotional competence, motivational factors, and other influences.

These broad conceptualizations of school readiness by national panels are not mirrored, however, in how school readiness is presented in state-level early learning standards that shape early childhood education programs and primary grades instruction. In a recent analysis, Scott-Little, Kagan, and Frelow (2006) reported that early learning standards adopted by 46 states strongly emphasize cognitive and language competence, and devote much less attention to socioemotional skills and children's approaches to learning. In some respects, it is understandable that state education administrators who are concerned with boosting early academic achievement would emphasize cognitive and linguistic skills, especially in an era of No Child Left Behind federal legislation that holds schools accountable for student achievement in these areas. Education administrators likely feel that it is best to emphasize the kinds of skills that are crucial to assessments of children's academic success. Indeed, the best predictors of early school reading and math achievement are reading and math test scores taken late in the preschool years (Duncan et al., 2007; LaParo & Pianta, 2000). But the emphasis on cognitive and linguistic abilities does not account for *why* children develop such disparate competencies in learning achievement during the preschool years, nor the factors that can help narrow the early-emerging achievement gap (for an authoritative review of research on this issue, see Bowman, Donovan, & Burns, 2000).

Indeed, quite a different picture of school readiness emerges when kindergarten teachers and the parents of young children are interviewed (National Center for Education Statistics, 1993, 1994). For parents and teachers, two of the three most important qualities for early learning are being "enthusiastic and curious in approaching new activities" and "communicates needs, wants, and thoughts verbally in the child's primary language." Teachers also highly rate "can follow directions," while parents listed "takes turns and shares" and "sits still and pays attention" as essential qualities. The *lowest* rated qualities for both parents and teachers are traditional academic skills such as "knows the letters of the alphabet," "can count to 20 or more," and "able to use pencils or paint brushes," perhaps because these skills can be easily taught in a kindergarten or primary grade classroom. Other surveys of kindergarten teachers indicate that difficulty in emotional or behavioral self-control, limited social skills, and lack of enthusiasm or interest in learning are some of the challenges to school readiness in the young children they teach (see Lewit & Baker, 1995; Rimm-Kaufman, Pianta, & Cox, 2000). Consistent with these concerns, behavioral and emotional problems account for serious problems in the early childhood education classroom and can provoke the removal of the child from the group (Gilliam, 2008; Yoshikawa & Knitzer, 1997).

The importance of socioemotional competencies for school readiness and early academic success remains, therefore, somewhat uncertain. Although national panels and the experience of teachers and parents together indicate that these competencies are important to school success, state-level early learning standards are focused more narrowly on cognitive and language skills. Our purpose in this chapter is to explore the significance of socioemotional development to early school achievement. We address the following questions: Is the development of self, social interaction skills, and relational competencies important to school achievement? What does developmental research indicate about how children grow in these areas during the preschool and early school

years? What do we mean by school readiness? Is there value in linguistic skills that are not emphasized in the early grades? How, in general, should we think about school readiness?

This chapter is concerned with social interaction and social competence in group settings within the classroom. It begins with a discussion of the chapter with content and concludes with a discussion of how we should think about school readiness.

This chapter is based on the work of the National Center for School Learning Foundations. Ross A. Thompson is the author of this chapter. It is unusual in that it addresses social and emotional development rather than cognitive development from the California Early Learning Standards and early learning standards. The origins of school success are discussed in this work for early childhood education (Chapter 10, this volume). The chapter can enhance socioemotional development, cognitive, language,

At the core of learning is the development of a new understanding. Children are born with a sense of curiosity and a desire to learn. They can discover their own strengths and weaknesses in their capabilities. They can discover their own interests and passions in their classroom environment. They can discover their own strengths and weaknesses in their social interactions. In this section, we discuss the importance of social and emotional development, especially relevant to school readiness. It is important to the child's development to have a strong sense of self and to be able to regulate their emotions. Second, it is important to have a strong sense of social interaction and to be able to interact with others. Third, it is important to have a strong sense of academic skills and to be able to learn from others. Children are able to learn from others and to learn from their own experiences. They are able to learn from their own experiences and from the experiences of others. This understanding is important to the child's development. Perhaps the most important qualities of curiosity and a sense of wonder are the qualities that lead to learning and engagement. This section discusses the importance of these qualities in this section.

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as when kindergarten national Center for Education the three most important in approaching new skills in the child's primary," while parents listed essential qualities. The child academic skills such as "able to use language," and "able to use language," teachers indicate that skills, and lack of enthusiasm-early school readiness in the young (Pianta, & Cox, 2000). These accounts account for serious concerns that led to the removal of (1997).

school readiness and early academic national panels and these competencies are focused more narrowly. This chapter is to explore the development. We address the development of skills, and relational developmental research on school and early school

years? What do we know about their relevance to school readiness and school success? Is there value in efforts to foster these competencies along with the cognitive and linguistic skills that are more typically encouraged in preschool and the early primary grades? How, in general, should we conceptualize school readiness?

This chapter is organized in three sections. The first focuses on elements of self-development (including motivational qualities) relevant to early learning. The second concerns social interaction skills and strategies that might be especially important to competence in group learning. The third section focuses on the importance of relationships within the classroom and at home as influences on early learning. We conclude the chapter with comments that draw together the implications of this discussion for how we should think about school readiness and the foundations of early school success.

This chapter is based on work conducted for the development of the California Preschool Learning Foundations (California Department of Education, 2008), for which Ross A. Thompson was primary author. This state learning foundation document is unusual in that it articulates to early childhood educators the dimensions of socioemotional development relevant to school readiness. Together with companion documents from the California Department of Education on infant-toddler learning foundations and early learning standards in the primary grades, it underscores the multidimensional origins of school success. Although in this chapter we do not discuss the implications of this work for early education practice and instruction, J. Thompson and Twibell (Chapter 10, this volume) describe curricular strategies and classroom practices that can enhance socioemotional growth in an early learning environment that also fosters cognitive, language, and other academic skills.

Development of Self

At the core of learning is the child and the personal qualities that motivate or inhibit new understanding. Children approach new challenges enthusiastically and with confidence in their capabilities or, less often, with disinterest and uncertainty about whether they can discover the answers to the questions that interest them. They approach the classroom environment with capacities for behavioral, cognitive, and emotional self-control and understanding of other people that significantly color their learning experiences. In this section, we consider five aspects of the development of self that are especially relevant to early learning and school success. First, a child's *self-awareness* is important to the self-confidence, conceptions of ability, and self-concept that motivate new learning. Second, classroom learning requires *self-regulation* of attention, thinking, behavior, feelings, and impulses, so that children can cooperate with peers and adults. Third, classroom success also requires *social and emotional understanding*, by which children are able to comprehend and to respect how they differ and are similar to those with whom they learn and work. Fourth, a capacity for *empathy and caring* enlists this understanding into compassionate responses when peers are distressed. Fifth, but perhaps most important to early learning, a child's *initiative in learning* denotes the qualities of curiosity, enthusiasm, and pleasure in discovery that make children active learners and engaged participants in classroom activities. Each of these qualities is discussed in this section.

Self-Awareness

Developmental research shows that early learning is motivated by how children regard themselves as learners, particularly the self-confidence with which they approach new challenges (Dweck & Leggett, 1988). This early-emerging “mastery motivation” can be readily observed in infants and toddlers (MacTurk & Morgan, 1995), and is part of what motivates very young children eagerly to explore their surroundings, to figure out how things work, to persist when initial efforts fail, and to master new skills. This early form of self-awareness grows as children mature through the preschool and early primary grade years to incorporate expanding awareness of themselves as unique physical and psychological individuals (Harter, 1999). A young preschooler’s self-awareness is initially based on simple, observable, external and physical attributes and skills (e.g., “I have red hair,” “I run fast”). Preschoolers also at times reveal an unrealistically optimistic and positive self-regard that may place them at risk for engaging in behaviors they are not actually capable of completing successfully (e.g., 3-year-olds may try to climb higher on playground equipment than they can safely navigate, or try and fail to solve problems that are not age-appropriate) (Harter & Pike, 1984).

Older preschoolers exhibit a more sophisticated self-awareness that includes internal, psychological characteristics (e.g., “I am nice”). Research has indicated an emerging awareness of these internal traits in children as young as 4 to 5 years old (Marsh, Ellis, & Craven, 2002; Measelle, Ablow, Cowan, & Cowan, 1998). By the kindergarten years, social comparison (e.g., “Tony is bigger than me”) has also become an important part of self-awareness and will become ever more important during the elementary school years (Pomerantz, Ruble, Frey, & Greulich, 1995). Taken together, self-concept and self-confidence develop significantly during the preschool and early school years, with significant implications for children’s motivation to succeed in academic (and non-academic) contexts.

How is self-concept shaped? Throughout this period, young children are very sensitive to how significant adults evaluate their behavior and performance, and how adults comment on their characteristics and value (Stipek, 1995; Stipek, Recchia, & McClintic, 1992). Consistent with classic concepts of the “looking-glass self,” young children readily incorporate into their self-awareness the evaluations they receive from parents, as well as from teachers and other adults who matter to them. As they become more sensitive to social comparison information and make spontaneous evaluations of themselves in relation to peers, grade schoolers become vulnerable to challenges to self-esteem arising from the discovery that they cannot do the things other children can do, especially if these are valued skills in the classroom or playground (e.g., “Her drawing is nicer than mine”). In these situations, teachers support children’s academic motivation when they encourage them to view *progress* in skills development as an important and desirable goal, emphasize their abilities to succeed, and attribute children’s failures to lack of effort or persistence—which can be improved—rather than intrinsic ability, which is more difficult to change (Dweck & Leggett, 1988).

Self-Regulation

“Self-regulation” can be viewed as the ability to suppress a dominant response and to perform instead a subdominant response. Thus, it is relevant to a variety of essen-

tial capabilities in classing distractions from (and suppressing irrelevant contrary impulses), reducing aggressive responses), research (see, e.g., Eisenberg, Fabes, & Raikes, 2007). Children’s regulatory abilities at an early elementary school age (see, e.g., National Center of Child Health and Human Development, 2003). In one study of first-graders’ reading skills, independent measures have shown significant adjustment (see, e.g., Zelazo & Cunningham,

The preschool age is a time when children’s capability in all areas of self-regulation and the more socialized development are one of the regions relevant to self-regulation. Parents also guide the development of self-regulation as they look away from a focus on children can later use self-regulation as they in other strategies to regulate than through the adult. At the end of the preschool period, children begin to coordinate strategies of self-regulation, such as seeking assistance, avoiding the classroom when a scary situation arises, and using satisfying ways (e.g., self-talk) to regulate later, through psychological strategies.

As parents and teachers support and solidated even by modeling self-control. Beyond the general support of children; conversely, research (see, e.g., Eisenberg, 2003; see Calkins & Keane, 2003) shows that circumstances may influence children’s moral self-control in the classroom (see, e.g., Shaw, Gilliom, Ingoldsby, & Nagin, 1997; Shaw, Gilliom, Ingoldsby, & Nagin, 1997). Children need to be aware that their behavior may arise for many reasons and that appropriate expectations also encourage com-

tial capabilities in classroom learning, including concentration of attention (and ignoring distractions from elsewhere or from the child's own impulses), focused thinking (and suppressing irrelevant thoughts or desires), behavior management (and subduing contrary impulses), regulation of sociability (and suppressing antisocial impulses; e.g., aggressive responses), and control of emotions (Kopp, 2002; Thompson, 2002; Thompson & Raikes, 2007). Indeed, several studies have shown that differences in these self-regulatory abilities are predictive of children's math and reading achievement in the early elementary school years (Alexander, Entwisle, & Dauber, 1993; National Institute of Child Health and Human Development [NICHD] Early Child Care Research Network, 2003). In one study, a behavioral measure of attentional self-regulation predicted first-graders' reading achievement scores independently of vocabulary and a prior measure of kindergarten reading ability (Howse, Lange, Farran, & Boyles, 2003). Other studies have shown significant associations between children's self-regulatory skill and independent measures of social competence, conscience development, and psychological adjustment (see, e.g., Eisenberg, Hofer, & Vaughan, 2007; Kochanska & Knaack, 2003; Zelazo & Cunningham, 2007).

The preschool and early grade years witness significant advances in self-regulatory capability in all areas, as reflected in the difference between a toddler's impulsivity and the more socialized, self-controlled conduct of a second-grader. Advances in brain development are one explanation for these achievements, particularly in higher brain regions relevant to self-control (Bunge & Zelazo, 2006; Diamond & Taylor, 1996). Parents also guide the development of strategies of self-control (e.g., coaching children to look away from a forbidden treat or to use words rather than hitting when angry) that children can later use on their own. Parents and teachers also foster the growth of self-regulation as they increasingly use explanations, negotiation, appeals to self-image, and other strategies to enlist children's behavioral cooperation through self-control rather than through the adult's proactive intervention or rewards alone. As a consequence, by the end of the preschool years, young children have begun to master a widening variety of strategies of self-control. With respect to emotion regulation, for example, young children begin to comprehend how their feelings can be managed by seeking another's assistance, avoiding or ignoring emotionally arousing situations (e.g., going to another room when a scary TV show is on), redirecting attention or activity in more emotionally satisfying ways (e.g., quitting a game that one is losing), using reassuring self-talk and, later, through psychological means, such as internal distraction (Thompson, 1990).

As parents and teachers know, however, self-regulatory skills are not well consolidated even by middle childhood, and children of any age vary considerably in their self-control. Beyond parental coaching and other specific strategies, research shows that the general support and sensitivity of parental care foster self-regulatory competence in children; conversely, adult punitiveness and overcontrol undermine it (Fox & Calkins, 2003; see Calkins & Williford, Chapter 9, this volume). Children who live in difficult circumstances may reveal the effects of stress in their deficits in emotional and behavioral self-control in the classroom, playground, or elsewhere (Brooks-Gunn & Duncan, 1997; Shaw, Gilliom, & Ingoldsby, 2003). For this reason, it is important for teachers to be aware that the difficult behavior of a child who cannot pay attention or sit still may arise for many reasons, including family stress, developmental immaturity, inappropriate expectations, or other factors independent of willful obstinacy. Teachers can also encourage competency in the many domains affected by self-regulatory abilities by

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being mindful of the dramatic differences in self-management between children entering preschool and those getting ready to enter kindergarten. Kindergartners are more persistent in problem-solving tasks, for example, and more capable of following directions (e.g., cleaning up in preparation for another activity), although they still have a long way to go in self-regulatory growth. Moreover, recent research indicates that carefully designed classroom strategies can improve overall levels of self-regulation in preschoolers, which may lead to improved academic and social performance (see Diamond, Barnett, Thomas, & Munro, 2007). Teachers who use activities involving self-regulation, such as encouraging children to talk through their problem-solving strategies and promoting sociodramatic play, may strengthen these skills, and the academic and social competencies with which they are associated.

Social and Emotional Understanding

For a long time, scientists and practitioners believed that young children are egocentric and have considerable difficulty distinguishing their own thoughts and feelings from those of others. New research refutes this view, however, and presents an image of young children who care deeply about the thoughts and feelings of others, and are interested in how those thoughts compare to their own (see Thompson, 2008). With this transformed view of the young child has come the recognition that social and emotional understanding is an essential part of early social competence. Children who are more socially and emotionally perceptive are superior playmates and get along better with adults, and the association between socioemotional understanding and social competence extends from preschool into elementary school (see reviews by Denham, 2006; Denham & Weissberg, 2004). These findings are relevant to school readiness and early academic achievement because of the connections between children's social and scholastic lives. Young children who are more competent in understanding others' feelings have been found, for example, to become more academically competent in elementary school, perhaps because of their more successful peer and adult relationships (Izard, 2002; Izard et al., 2001; see also Raver, 2002; Raver & Knitzer, 2002).

Developmental researchers portray the growth of social and emotional understanding in terms of an emerging "theory of mind"—that is, a child's developing understanding of other people's internal mental states and how these states motivate behavior. Between the ages of 3 and 5, children progress from a theory of mind primarily concerned with how simple desires, feelings, and goals motivate behavior to a more advanced understanding of how people's thoughts and beliefs also contribute to behavior (see Harris, 2006; Wellman, 2002). Children learn that beliefs can be mistaken, which leads to the realization that people can be misled or fooled. Young children also learn that *they* can fool others, and that they can conceal or mask their own feelings and beliefs (e.g., when denying wrongdoing or conveying appreciation for an undesirable gift).

A developing theory of mind leads to other achievements in psychological understanding. One is growth in understanding others' *emotions*. During the preschool years, children become increasingly aware of the psychological basis of emotional experiences (e.g., Joey is mad because he can't go outside to play) (Denham, 1998, 2006; Thompson & Lagatutta, 2006). This awareness leaves them better equipped to understand and interact with their classmates in an increasingly sophisticated fashion. Another significant gain during the later preschool years involves children's *event knowledge*. Children

begin to understand their classroom, with experience (Hudson, 2006). Culture, and ethnicity during the preschool years (see this volume). Finally, it contributes to social competence (see Gelman, 2000).

There are many reasons why preschoolers may not understand. Children are likely to be egocentric because her toy becomes more capital than psychological motivation. Children realize that her classroom gets him, whether others' feelings produce causes, and to help

Empathy and Caring

An important consideration is their caring. Children concern a person's response. Children can be observed even in that distressed person. Empathy is important to acting in a helpful, difficult task for a child, but a failure to help a child. A 3-year-old child can even become mild to help the situation by offering a favor or by offering appropriate help (Sadosky, 2006; Thompson, 2006). Children can also verbally communicate with a child (e.g., "Don't be angry").

Gains in empathy are seen in children who are more active. Children who are more active in greater school environments become more aware of their needs. Lee-Kim, & Ardila (2006) come to their definitions of empathy in grades also become the class pet or off

begin to understand and predict familiar routines, such as those they encounter in their classroom, which contributes to their sense of predictability and control in daily experience (Hudson, 1993; Nelson, 1993). Growing awareness of *diversity* in gender, culture, and ethnicity is another significant development of children's social understanding during the preschool years (Aboud, 2005; see also Chapter 12 by Barbarin & Odom, this volume). Finally, young children begin to grasp the concept of *personality* and how it contributes to stable features of individual behavior (Giles & Heyman, 2005; Heyman & Gelman, 2000).

There are many examples of children's burgeoning social and emotional understanding throughout the preschool and early primary grade years. Although younger preschoolers may notice and comment on their peers' emotional states, their descriptions are likely to be behavioral and focused on external factors (e.g., Sally was *crying* because her toy broke). As children approach the primary school years, however, they become more capable of describing emotions directly and can attribute more complex psychological motives for them. A kindergartner, for example, would be able to recognize that her classmate felt *sad* because he *thought* his mother was not going to arrive to get him, whether or not it was actually true. Children's efforts to describe and explain others' feelings provide opportunities for teachers to discuss children's feelings and their causes, and to help children understand why their peers feel and respond as they do.

Empathy and Caring

An important consequence of young children's increasing social and emotional understanding is their capacity to respond empathically to others in distress. "Empathy" concerns a person's resonant emotional response to another's distress, a response that can be observed even in infants and toddlers. "Caring" concerns a person's efforts to help that distressed person, which often (but not always) derives from empathy. The distinction is important because young children may feel empathy but not yet be capable of acting in a helpful, caring manner. Knowing how to respond to a peer in distress is a difficult task for a young child (more difficult still is responding to a distressed adult), but a failure to help should not be interpreted as a lack of emotional concern in a young child. A 3-year-old may pay close and questioning attention to a crying peer, and may even become mildly upset, but he or she may not reliably offer any genuine assistance to help the situation. Older children, however, may work to cheer a distressed classmate by offering a favorite toy or a hug. As children enter elementary school, their capacity for appropriate and situation-dependent responses increases (Eisenberg, Spinrad, & Sadovsky, 2006; Thompson, 1998). A 5-year-old may offer to help repair a broken toy or to verbally comfort another child by addressing specifically what is bothering the child (e.g., "Don't be scared. It's just a puppet").

Gains in empathy and caring lead to greater social competence and to children who are more actively engaged in the well-being of their classmates, teachers, and the greater school environment. Late in preschool and into the primary grades, children also become more aware of what they perceive as unjust or unfair behavior (Killen, Pisacane, Lee-Kim, & Ardila-Rey, 2001). If a peer is being teased, for example, they may actively come to their defense. Children at the transition between preschool and the primary grades also become more interested in caregiving, whether bringing a special treat for the class pet or offering water to a classmate who is coughing. Teachers can encourage

competencies in this domain by allowing their students to be involved in comforting and providing care for other people.

Initiative in Learning

How young children approach the challenges of learning and problem solving is an essential component of their academic success and school competence. Their "initiative in learning," which can be defined as the child's classroom engagement, motivation, and participation, is an important predictor of classroom achievement in kindergarten and throughout elementary school (Alexander et al., 1993; Duncan, Claessens, & Engel, 2005). Children bring to the classroom their natural curiosity and interest in learning, and through positive educational experiences gain confidence in their abilities to make their own intellectual discoveries (Thompson, 2002). This is especially true when parents and teachers actively solicit children's ideas and questions, encourage them to take the lead in investigating a new discovery, and positively affirm their eagerness to learn. There are also important developmental changes in children's initiative, persistence, and enthusiasm in the classroom. Although younger preschoolers approach novel learning situations with confidence and enthusiasm, they are also more likely to experience frustration when confronting difficult problems and give up. Older preschoolers and children in the primary grades show greater persistence and also greater creativity and initiative in their problem solving (Bowman et al., 2000; Renninger, Hidi, & Krapp, 1992).

Though most children have a natural interest in learning and discovery, they bring considerable individual differences, beginning in early childhood, in self-confidence, enthusiasm, and motivation to new learning situations. Several studies have shown that children develop unique learning styles that influence the initiative they take in their learning experiences and how persistent they will be when faced with difficult challenges (Burhans & Dweck, 1995; Dweck, 2002; Dweck & Leggett, 1988). Much of the research has focused on two different orientations toward learning: performance orientation and learning orientation. For a child with a "performance orientation," the primary goal of learning is to elicit positive evaluations from others and to avoid negative judgments. As a consequence, these children may avoid or fail to persist in situations where success is unlikely, and they may miss important educational opportunities. Furthermore, performance-oriented children are vulnerable to developing learned helplessness, whereby they tend to give up after failing due to a lack of confidence in their ability ever to succeed.

For children with a "learning orientation," on the other hand, the purpose of learning is to increase their abilities. A learning-oriented child is more likely to tackle difficult challenges and to persist even if early efforts are unsuccessful. For these reasons, a strong learning orientation best predicts classroom achievement. Differences in learning orientation have been found to emerge as early as the late preschool years (Burhans & Dweck, 1995; Smiley & Dweck, 1994) and may arise from a variety of influences. One of the most important influences is how teachers and parents respond to children's achievement successes and failures: Adults who emphasize children's efforts and intrinsic abilities contribute to the development of a learning orientation in children. Extrinsic motivators, such as stickers or other rewards for good performance, should be used only sparingly, and strong effort should be valued even if it results in initial failure. Young

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Another way for adults to encourage persistence and a strong learning orientation in young children is to structure carefully the achievement challenges they offer children. It is important to ensure that these challenges not only are within children's capabilities but also contribute to the development of new knowledge and skills. The development of complex skills can be fostered by teachers who reinforce partial achievements and approximate competence, provide clear explanations and prompts as children are working, and exhibit confidence in the children. In these and other ways, young children have successful learning experiences and develop the self-regard that is part of a strong learning orientation.

Development of Social Interaction Skills

The personal qualities we discussed earlier that contribute to academic achievement are important. But classroom learning is also a group activity in which children's capacities to interact constructively with teachers and peers, and to understand their shared roles and responsibilities as group members are also essential qualities to academic achievement. A young child who cannot cooperate with other children, follow the teacher's instructions, manage transitions in the daily classroom routine, or who fails to perceive him- or herself as both an individual and a member of a "classroom community" is unlikely to benefit as well from classroom instruction as children who can. In this section, therefore, we consider four kinds of social interaction skills that are relevant to classroom competence and early learning. First, children's *interactions with familiar adults* are important for understanding the social skills, trust, and mutual respect that underlie their encounters with teachers, volunteers, and other adults. Second, *interactions with peers* are also important for young children's abilities to work and play constructively with other children in the classroom. Third, we consider children's developing capacities for *cooperation and responsibility*, which involve following instructions and responding appropriately to the behavioral expectations of adults. Finally, we discuss skills of *group participation*, which involve understanding how to participate with other children and adults in shared activity and one's role as a classroom member. Each of these four kinds of social interaction skills is discussed in the pages that follow.

Interactions with Familiar Adults

During the preschool and early school years, children must adjust to regularly interacting with adults who are not their primary attachment figures. These teachers and teacher aides, volunteer staff, center directors or principals, parent volunteers, and other adults are part of the constellation of people with whom children interact in their preschools or early primary grade classrooms. Although these adults do not necessarily serve as sources of comfort and security in the way that children's attachment figures do, children must be able to navigate interactions with them competently to succeed in school because adult-child interactions are essential contributors to classroom learning.

The social capabilities of young children with familiar adults build on many of the developing capacities we discussed earlier (Thompson, Goodvin, & Meyer, 2006).

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Interactions with adults require self-regulatory skills, including children's focused attention and behavioral self-control when working with another on a learning activity. Children must be capable of understanding and behaving according to what is expected of them; communicating clearly their ideas, feelings, and experiences; asking questions about things they do not understand; seeking assistance, when necessary; and responding cooperatively as a member of the classroom group. Advances in self-awareness and in socioemotional understanding enable children to function better in a group and to respond more perceptively and appropriately to the behavior of adults and other children—although, as indicated earlier, this ability may be enlisted for purposes of deception and manipulation as children begin to understand how they may deliberately mislead others' thoughts.

Important developmental changes in these capacities occur during the preschool years and early primary grades. A young preschooler shows increasing ease in interacting with adults who become familiar to the child. Children of this age may show off their accomplishments, seek the adult's assistance, and respond to the adult's initiatives or requests with increasing self-confidence. Older preschoolers are capable of greater initiative and engage in more sustained interactions with an adult, such as cooperating with a classroom aide in the give-and-take of solving a problem set, or participating in an extended conversation about the morning's events, with the child contributing new and relevant information. By the primary grades, children understand better the roles of the various adults in the classroom and engage these adults in appropriate ways throughout the day. Adults contribute to these skills when they respond with interest and enthusiasm to children's initiatives, model respectful social interaction and communication, coach children about how to interact with other adults, and encourage children to share their ideas and experiences with confidence.

Interactions with Peers

Beyond the academic skills they acquire, classroom learning presents unparalleled opportunities for young children to develop social skills with peers. Unfortunately, developmental scientists and practitioners have tended to underestimate the skills and sophistication of young children's interactions with peers, focusing instead on episodes of peer conflict as confirmation of young children's egocentrism and limited social interest. Current research has revealed, however, that considerable social understanding underlies preschoolers' capacities to read the cues of other children and respond appropriately, whether in shared tasks, brief conversations, or pretend play. We described the advances in social understanding that enable these peer interaction skills as deriving from young children's developing "theory of mind" and its contributions to greater insight into other children's feelings, goals, desires, thoughts, and ideas. In addition, the preschool years and early primary grades witness significant advances in conflict resolution skills, such that children become more adept and resourceful in their efforts to manage social conflict with other children in a constructive manner. Indeed, rather than an indication of their limited social understanding, conflict with peers is actually an important forum for the development of social understanding and social skills in early childhood.

Because peers are such a significant feature of the classroom environment, interactions with peers are an important influence on academic achievement. Children who

have positive peer relationships are more involved in learning and achieve more in the classroom (Dodge, 1996, 1997). Peer rejection is associated with lower academic achievement but also because of the negative influence of peers in the classroom (Dodge, 1996, 1997).

The preschool years are a time of rapid growth in the breadth and sophistication of social interactions. Young children advance from simple to more complex and generalized social interactions. Interactions go smoothly, with sharing and mutual cooperation. The previously discussed skills for elementary school children are expected to participate in social interactions (Killen et al., 2000; Dodge, 1994), and generalized social skills (Izard et al., 2004; Izard et al., 2005). Cooperation, may be

Changes in pretend play are themselves a complex activity. Multiple pretend roles and episodes of pretend play, correction, and mutual cooperation. In preschool years, children show deviations from the typical flow, and easily integrate their social interactions.

Early childhood is a time of rapid growth in conflict resolution skills. Disagreements with peers, verbal aggression, and social skills. When disagreements occur, children use multiple strategies to alleviate conflict (Dodge, 1987, 1988). These children are elementary school years

Children's focused attention and learning activity. Children are expected of what is expected of them; asking questions when necessary; and responding to self-awareness and behavior in a group and the behavior of adults and other children. Children are expected for purposes of learning they may deliberately

During the preschool years, children show an ease in interacting with peers. As age increases, children may show off the adult's initiatives and be capable of greater social skills, such as cooperating with a peer, or participating in a group. Children understand better the social rules and respond in appropriate ways to social interaction with interest and enthusiasm, and encourage

Children who have positive peer relationships look forward to coming to school and become more involved in learning activities, thus benefiting more from them. Studies have shown that students with high peer acceptance participate in more classroom activities and achieve more in the classroom (Ladd, Birch, & Buhs, 1999; Ladd, Kochenderfer, & Coleman, 1996, 1997). Peer rejection is a problem not only because of children's feelings of loneliness but also because rejection causes children to withdraw from involvement with peers in the classroom, express a desire to avoid school, and perform more poorly on academic achievement measures (Buhs & Ladd, 2001).

The preschool years and early primary grades are a period of rapid growth in the breadth and sophistication of peer interaction skills (Rubin, Bukowski, & Parker, 2006). Young children advance from simple activity in parallel with one or two playmates to more complex and genuinely interactive activity with several other children. Older preschoolers and kindergartners also become more adept at the skills that make peer interaction go smoothly, including better communication skills, emotional understanding, sharing, and mutual cooperation (e.g., spontaneous turn taking), which are based on the previously discussed advances in social understanding. These are important foundations for elementary school, where classroom group size is typically larger and children are expected to participate in group activities. During the early primary grades, children add to their social repertoires a growing comprehension of fairness in peer interactions (Killen et al., 2001), an expanding range of social problem-solving skills (Crick & Dodge, 1994), and greater emotional understanding and sensitivity (Denham & Weissberg, 2004; Izard et al., 2001). However, it is important to note that in one longitudinal study, kindergarten teacher ratings of social skills and aggressiveness were each positively associated with first-grade teachers' ratings of student achievement (Dowsett & Huston, 2005). One interpretation of this finding is that assertiveness, as well as cooperation, may be important to peer acceptance.

Changes in pretend play also reflect these developing social skills. Pretend play is itself a complex activity involving the coordination of behavior of several children in multiple pretend roles according to a shared sociodramatic "script." Yet this hallmark of preschool peer play blossoms in sophistication as young children proceed from brief episodes of pretense to longer, unfolding dramas involving well-coordinated roles, self-correction, and mutual responsiveness (Goncu, 1993; Howes, 1992). By the end of the preschool years, children plan complex pretend-play scenarios, correct each other for deviations from the roles they have assumed, stage-manage new directions in the story flow, and easily integrate new children (and roles) into the activity. That older preschoolers are capable of this kind of complex sociodramatic play confirms our new appreciation of their social understanding and self-regulatory competencies.

Early childhood also witnesses changes in the nature of peer conflict and growth in conflict resolution strategies. Younger preschoolers are more likely to respond to disagreements with physical aggression, whereas older preschoolers may rely more on verbal aggression, such as teasing, that reflects growth in self-control (Tremblay, 2000). When disagreements arise, an older preschooler may also be capable of suggesting simple strategies to alleviate conflict (e.g., offering to take turns playing with the toy truck that several children are fighting over), alternative activities, or negotiation (Howes, 1987, 1988). These conflict resolution strategies, which continue to develop during the elementary school years, are essential to children's social competence and, therefore, to

school competence. For this reason, educators should strive to support and assist children in developing and utilizing these skills, as well as help them understand the feelings and viewpoints of other children, suggest and model constructive interaction skills, and reinforce cooperative efforts.

Cooperation and Responsibility

For many years, guided by the theories of Piaget and Kohlberg, researchers viewed young children as being motivated to cooperate by the rewards and punishments of adult authorities (e.g., a preschooler cleans up the art materials so the teacher doesn't get annoyed). However, just as recognition of children's social and emotional competence has evolved in recent decades, so has a new view of the early growth of cooperation and responsibility emerged. Studied under the term "conscience development," this new approach recognizes that children are motivated to cooperate based on not just rewards and punishments but also their emotional attachments to their caregivers, a desire to view themselves with positive regard, and their sensitivity to the feelings of others (Kochanska, 1997, 2002; Thompson, Meyer, & McGinley, 2006).

Because of their strong emotional connections to caregivers, preschoolers seek to cooperate with the adults' expectations from a desire to maintain a mutually cooperative relationship. An adult's disapproving vocal tone after child misbehavior may provoke an apology not only to avert anticipated punishment but also to restore a positive relationship with an adult on whom the young child relies emotionally. Thus, positive relationships with parents, teachers, and other adults are an important resource for the growth of conscience. Furthermore, as young children become increasingly sensitive to the feelings and needs of others, they also are motivated to behave in a way that will not cause distress to other people. By the end of the preschool years, another important resource for conscience development emerges. Young children come to view *themselves* more positively when they cooperate and act responsibly, which further motivates these behaviors. Their positive self-regard when acting in an approved fashion derives in part from the adult approval they obtain, but it is an internal rather than external reward. In short, young children are motivated toward cooperative, responsible conduct because of not only external motivations (rewards and punishments) but also an internal standard of behavior based on a desire to maintain positive relationships with adults who matter, and to view themselves as cooperative and good individuals. This internal standard is a much more mature and reliable basis for cooperative conduct because it does not depend on the responses of adult authorities, and its foundations develop during the preschool years.

The capacity to behave cooperatively and responsibly (an important component of group participation) is a significant predictor of early school success because responsible behavior not only fosters better relationships with teachers and peers but also enhances children's involvement in learning activities (teachers may also pay more attention to children who are cooperative). Research has shown that individual differences in children's cooperation are directly associated with children's early academic achievement. McClelland, Morrison, and Holmes (2000) found, for example, that "work-related skills" in kindergartners (e.g., compliance with instructions; completion of work) predicted children's academic achievement 3 years later, even after they controlled for ear-

lier academic achievement (2004). Of course, the other developmentally key role because it enables children to comply with a behavior because it enables them when they behave cooperatively.

Because much cooperation is relatively easy to witness, adult support is especially important. Adults may strive to behave cooperatively or when strongly influenced by a peer). Teachers also comment on behavior, comment on and draw attention to important contributions. An important contribution is to ensure that young children are as capable as possible (e.g., expect frustration for children in relationships that can be enhanced by a mutually cooperative or adversarial relationship, particularly challenging misbehavior on other occasions).

Group Participation

In preschool and primary school, children participate in activities that requires them to practice reading skills in group activities, whole-group activities, group membership cooperation (knowing what to do, Follow the Leader), he applying rules for classroom activities in classroom activities, aspects of group participation, consideration, they are in grade classroom. In the school success.

Fortunately, many children have a foundation for these skills. Knowledge enables children to be expected of them (Hurler and dismissal a

lier academic achievement (see also Alexander et al., 1993; Yen, Konold, & McDermott, 2004). Of course, the development of cooperation and responsibility is built on many of the other developmental domains discussed in this chapter. Self-regulation plays a particularly key role because cooperation often requires one to suppress an initial response to comply with a behavioral standard. Developing self-awareness also plays a key role because it enables older preschoolers to view themselves positively and approvingly when they behave cooperatively.

Because much cooperative behavior is directed toward teachers and caregivers, it is relatively easy to witness developmental changes in cooperation and responsibility. Adult support is especially important early in the preschool years, when young children may strive to behave cooperatively but lack the self-regulatory capacities to do so consistently or when strong contrary impulses are involved (e.g., when distressed or frustrated by a peer). Teachers and adult caregivers can provide regular prompts about expected behavior, comment gently about inappropriate conduct, reinforce desirable behavior, and draw attention to children's cooperative conduct as a model for others. Another important contribution that adults provide to the growth of cooperation and responsibility is to ensure that behavioral expectations are developmentally appropriate. When young children are asked to comply with requirements that significantly stretch their capabilities (e.g., expecting 3-year-olds to sit quietly for an extended period), the result is frustration for children, as well as their teachers, and a breakdown in the positive relationships that can be a foundation for cooperative conduct. Children's cooperation is enhanced by a mutually positive adult-child relationship. By contrast, when relations are coercive or adversarial (which can occur when children's behavioral problems are particularly challenging), children may comply when adults are monitoring them but misbehave on other occasions.

Group Participation

In preschool and primary grades, children become part of a "classroom community" that requires them to participate as group members. Children may be expected to practice reading skills in pairs, create small groups for science projects, and participate in whole-group activities. Understanding and applying the roles and responsibilities of group membership contributes to the growth of social interaction skills and include knowing what to do during group routines (e.g., circle time or recess) or games (e.g., Follow the Leader), helping to prepare for and clean up group tasks, understanding and applying rules for classroom behavior (e.g., sharing and taking turns), managing transitions in classroom activities, and participating in group projects. Because most of these aspects of group participation require children to take other children's interests into consideration, they are an important basis for the social skills required of a primary grade classroom. In these ways, group participation skills are essential components of school success.

Fortunately, many of the developmental achievements discussed earlier provide a foundation for these group participation skills. Developing memory skills and event knowledge enables older children to remember daily routines and the behavior that is expected of them (Hudson, 1993; Nelson, 1993). As a result, children anticipate gathering and dismissal activities at the beginning and end of each day, are aware that

cleanup activities must precede (and follow) snacks, know what to do before free-play or painting projects, understand how the class prepares for mealtimes, and know what they must do for each activity. Developing event knowledge also helps older children manage transitions better because they can mentally anticipate the activities that follow each transition. Growth in self-regulatory skills in turn enables older children to stay on task better, apply behavioral expectations to their own conduct, and spontaneously self-correct to maintain compliance (Bronson, 2000; Kopp & Wyr, 1994). In addition, advances in behavioral and attentional self-control enable children to focus their interest deliberately on the task at hand, sit still for longer periods of time without fidgeting or becoming distracted, and participate in social activities in which specific timing and turn taking are important (e.g., singing activity songs or playing a board game in which players alternate moves) (Zelazo, Müller, Frye, & Marcovitch, 2003). Furthermore, with growth in self-awareness, young children can view themselves as not just individuals in the classroom but as members of a group (the entire class, a small study group, or a collaborating pair) with cooperative goals and purposes. This capacity also builds on growth in social and emotional understanding that enables children, in the context of group activity, to coordinate their interests and goals with those of other children and adults (Harris, 2006; Thompson, 2006). Finally, their developing sense of cooperation and responsibility, motivated by the desire for adult approval and positive self-regard, enhances older preschoolers' commitment to cooperate with classroom procedures, to anticipate them before being reminded and, at times, to remind other children about them (e.g., "We wash our hands before lunch").

Taken together, a variety of developing capacities contribute to young children's ability to participate constructively as group members. Because these skills are not fully developed, however, children benefit from adults' efforts to offer guidance and coaching, including reminders about expected behavior, explanations about why the procedures are the way they are, prompts (e.g., songs, games, or picture cards) to support effective group participation, and praise and reinforcement of constructive conduct.

Development of Relationships

A central ingredient to school readiness and academic success is the quality of the relationships that young children share with others who are important to them. In their first experience with child care or a classroom, preschoolers arrive with the legacy of a parent-child relationship that has influenced their sense of themselves as learners, their enthusiasm for discovery, and their interactions with other people. As their social worlds expand, close relationships with special teachers, caregivers, and peers color children's experience of learning and motivation to succeed. Because these relationships are important to learning, in this section we consider the influence of three kinds of relationships that are central to early learning. First, we consider *attachments to parents* and the foundation they provide to children's self-confidence, learning skills, and social competence. Second, we examine *close relationships with teachers and caregivers* as a critical feature of the classroom environment to young children. Third, we discuss *friendships with peers* because of the importance of peer acceptance to school adjustment and classroom competence. Each of these three kinds of relationships is discussed below.

Attachments to Parents

Decades of research rely on their attachment relationships influencing what other relationships tutor young children, in negotiating and gaining self-confidence. Relationships also play a role in school achievement. Relationships subsequent to primary grades, have been found to show fewer conditions (Morrison, Rimm-Kaufman, et al., 2005; Pianta, Arsenio, Hess, and Ladd, 2005). The mother-child relationship at age 4, and was predictive of school achievement.

Most of this research of mothers' greater involvement in child development figures in a number of cases nonbiological parents whose biological parents these adults become parents (e.g., a stepparent). This assumes a parenting role as an attachment figure.

As children develop, they become less dependent on their primary caregivers. They become more independent (Marvin & Britner, 2003). Their primary caregivers taking pleasure in their problem-solving tasks. They are able to talk about their experiences. These and other figures at every age. They receive the support of their parents. They also become confident. Preschoolers may have more confidence especially if they are supported through their relationships. They can better cope with emotional representations.

Attachments to Parents

Decades of research on early parent-child relationships have shown that young children rely on their attachment figures for emotional security and well-being, and that these relationships influence developing personality, social skills, self-concept, and understanding what other people are like (see Thompson, 2006). Experiences in close relationships tutor young children in understanding and respecting others' views and feelings, in negotiating differences of opinion, in learning to get along with other people, in gaining self-confidence, and in valuing discovery. Perhaps for these reasons attachment relationships also play an important role in the development of early school readiness and school achievement. Children with more secure and supportive parent-child relationships subsequently exhibit greater academic success in kindergarten and the early primary grades, have better work habits, are more socially competent in the classroom, and show fewer conduct problems (Burchinal, Peisner-Feinberg, Pianta, & Howes, 2002; Morrison, Rimm-Kauffman, & Pianta, 2003; NICHD Early Child Care Research Network, 2005; Pianta, Nimetz, & Bennett, 1997). In one longitudinal study, Estrada, Arsenio, Hess, and Holloway (1987) found that a measure of the emotional quality of the mother-child relationship was associated with the child's cognitive competence at age 4, and was predictive of school readiness measures at ages 5 and 6, IQ at age 6, and school achievement at age 12.

Most of this research focuses, of course, on the mother-child relationship in light of mothers' greater involvement in the lives of young children, but it is likely that these conclusions extend also to father-child relationships. Moreover, the significant attachment figures in a child's life do not necessarily have to be biological parents. In some cases nonbiological parents may take full responsibility for the child (e.g., when a child whose biological parents are absent is raised by an aunt and uncle or a grandparent) and these adults become "psychological parents" to the child. On other occasions, nonparents (e.g., a stepparent) may raise the child alongside a biological parent. Any adult who assumes a parenting function in a child's life, regardless of biological ties, can serve as an attachment figure.

As children develop, their relationships with their caregivers change: Children become less dependent on physical proximity and can better tolerate separations, and they become more focused on building a relationship of mutual positive cooperation (Marvin & Britner, 1999). At all ages, of course, children show clear preferences for their primary caregivers, specifically seeking them out for comfort when distressed, taking pleasure in demonstrating their achievements to them, seeking their assistance in problem-solving tasks, enjoying shared activities and experiences with them, and being able to talk about troubling topics that they do not feel comfortable discussing with others. These and other behaviors reflect children's emotional reliance on their attachment figures at every age. As they mature, however, children take greater initiative in seeking the support of their caregivers, and in striving to please and to cooperate with them. They also become capable of better managing separations from their caregivers. Young preschoolers may have difficulty coping with the parent's departure in the morning, especially if they are new to the classroom, and may require comfort from their teachers and support throughout the day. Older preschoolers and children in the primary grades can better cope with separations because they are more able to maintain satisfying mental representations of attachment figures, and the relationship they share sustains them

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while they are away from their parents. Older children are also more capable of predicting the parent's return, maintaining emotional self-control, and engaging in classroom activities and peer relationships while they are in the classroom.

Although teachers rarely have opportunities to observe directly the quality of children's interactions with their attachment figures, except when parents bring their children to school and later pick them up, their recognition of the importance of these relationships to their students can influence their interactions with children throughout the day. Teachers can make family activities and relationships a topic of discussion in the classroom, encouraging children to bring items from home to share and making the family's culture and language a focus of interest for the class. These activities can contribute significantly to the growth of self-awareness when children are encouraged to take pride in their family identity and experiences. Teachers also respect the importance of attachment relationships when they aid children in managing separations by encouraging children to talk about their family caregivers and when they will return. At times, family relationships are an important source of assistance when children exhibit behavioral or emotional problems in class. On these occasions, consultation with children's attachment figures may create an important bridge between the family and the classroom, helping teachers work with parents in identifying sources of assistance for the child or the family.

Close Relationships with Teachers and Caregivers

Young children develop close relationships with not only nonparental figures at home (e.g., grandparents) but also adults outside the home (Dunn, 1993; Howes, 1999). They rely on their close relationships with certain teachers, caregivers, or other adults for a sense of security, comfort when upset, and support for the challenges of the classroom. This can be observed when a preschooler seeks the assistance of a particular teacher for help (sometimes refusing the assistance of other adults), or when a first-grader eagerly shares an experience at home with a classroom teacher to whom he or she has developed a special attachment. These relationships can motivate excitement about learning, support self-confidence, and foster social development in many of the same ways that parent-child attachments do.

Perhaps for this reason, a number of studies have found that the security and warmth of a preschooler's relationship with the teacher is predictive of subsequent classroom competence, attentional skills, and social competence in the kindergarten and primary grade classroom (Pianta et al., 1997; for reviews, see Bowman et al., 2000; Lamb, 1998). In a similar manner, the quality of the teacher-child relationship in kindergarten and the primary grades is important in children's adaptation to school and their success in the classroom, with conflict in the child-teacher relationship predicting poorer academic performance and greater behavioral problems, sometimes much later in the school years (Birch & Ladd, 1997; Hamre & Pianta, 2001; LaParo & Pianta, 2000; Pianta & Stuhlman, 2004a, 2004b). Children who develop warm, positive relationships with their teachers are more excited about learning, more positive about coming to school, more self-confident, and achieve more in the classroom. A positive teacher-child relationship may be especially important for young children who are otherwise at risk of academic difficulty because of the support it can provide for classroom participation

and self-confidence value in the growth

The behaviors a preschool or primary school child exhibit when they have a close relationship with a teacher, such as seeking approval, about troubling to expectations and emotions, and that young children do not have the same relationships with adults in multiple settings, as unique—meaning that their relationships elsewhere contribute to their overall logical well-being,

As with the possibility for maintaining these relationships as they mature. Preschool relationships they develop with children's initiative when children's child relationships that teachers respect and develop a friendly. In these and other support for young

Friendships with I

Friendships with children are successful because they provide a reason to look for support (Ladd et al., 1999). The significance of peer relationships is especially true for special peers.

The sophisticated nature of these relationships (Rubin, 1989; Rubin, 1989) during the preschool years, such as friends playing together (e.g., mutual assistance), are also more psychologically valuable on relationships that children can see their friends (imaginative play)

and self-confidence (Pianta, Steinberg, & Rollins, 1995). Thus, there is considerable value in the growth of warm, close relationships between teachers and young children.

The behaviors that indicate a young child has developed a special relationship with a preschool or primary grade teacher are similar to those reflecting parent-child attachment. Children seek comfort, security, and support from the adults with whom they have a close relationship, and prefer that person for shared activity when seeking assistance or approval, displaying accomplishments, and sharing conversation, especially about troubling topics. Children are particularly responsive to these adults' behavioral expectations and expressions of disappointment when they misbehave. This is not to say that young children's close relationships to teachers are the same as parent-child attachments, nor that teacher-child relationships are as important to young children as their relationships with parents (they are not). Rather, children seek support from significant adults in multiple settings, and these special relationships often have shared—as well as unique—meaning for the child. Multiple close relationships with adults at home and elsewhere contribute significantly to young children's social development and psychological well-being, and do not diminish the strength of their parental attachments.

As with the parent-child relationship, children take greater initiative and responsibility for maintaining a mutually positive association with their special teachers as they mature. Preschool and primary grade teachers can respect the importance of the relationships they develop with children by responding positively and supportively to children's initiatives, being enthusiastic about their accomplishments, paying attention when children need assistance or comfort, and recognizing that different adult-child relationships are not interchangeable in young children's worlds. Another way that teachers respect the significance of these relationships to children is by working to develop a friendly, cooperative association with children's attachment figures at home. In these and other ways, close relationships with teachers and adult caregivers provide support for young children's self-confidence and enthusiasm for school.

Friendships with Peers

Friendships with other children provide a foundation for school readiness and academic success because they contribute to children's positive classroom experiences, give them a reason to look forward to coming to school, and contribute to academic achievement (Ladd et al., 1996, 1997, 1999). Interactions with peers are, as we indicated earlier, significant influences on children's classroom experiences, and friendships enhance the significance of peer associations through children's close relationships with one or more special peers.

The sophistication of these friendships increases with age (Parker & Gottman, 1989; Rubin, Coplan, Chen, Buskirk, & Wojslawowicz, 2005; Rubin et al., 2006). During the preschool years, friendships become increasingly stable, exclusive (i.e., a group of friends playing tag may not allow another child to join in the activity) and reciprocal (e.g., mutual assistance when a child is teased by other children). Because older children are also more psychologically aware of the friendships they share, they place a greater value on relationships (e.g., telling a parent that they want to go to school so that they can see their friend). Children engage in more sophisticated forms of play (e.g., complex imaginative play) and greater prosocial behavior with their friends. Somewhat paradox-

ically, preschoolers direct more affectionate and positive behaviors toward their friends but also engage in more conflict with their friends than with nonfriend peers. Such elevated levels of conflict probably arise because friends spend more time together than do nonfriends. Conflict may also arise because there is greater emotion invested in the interactions of friends, and such emotions can be difficult for young children to manage. As children enter kindergarten, however, they are more likely to negotiate with friends or adopt other strategies to keep conflict from escalating. They are also more capable of maintaining friendships and allowing those relationships to recover from conflict (Gottman, 1983; Hartup, 1996; Parker & Gottman, 1989).

Teachers contribute to the value of friendships when they encourage young children to enjoy shared activities with friends (while remaining vigilant to the consistent exclusion of other children who may wish to join them), helping children to recognize and respond appropriately to the feelings of their friends, and assisting them in conflict resolution. Teachers should also remain watchful for students, particularly near the end of their preschool years, who seem to have formed few close relationships with their peers. Because friendship is such an important predictor of social competence and school success, problems in this area should be taken seriously.

Concluding Comments

There is no doubt that linguistic, literacy, numeracy, and other cognitive skills are essential to school achievement. To acquire the skills needed for success in a complex information and technological society, children must master foundational cognitive skills early in life. But the growth of the mind does not occur independently of other features of early childhood development. Whether children are being home-schooled or tutored, have extensive or no preschool experience, or are being educated in a private or public primary grade school, learning is a social activity that involves skills for interacting with others. Learning also enlists the motivational qualities of the self, particularly the child's curiosity and interest in discovering new things, and the confidence that he or she can succeed in doing so. And because early childhood development depends so significantly on close relationships, the quality of those relationships has significant implications for how children learn. Our conclusion in this chapter is that school readiness and early school achievement enlist significant social and emotional capacities that make early learning a multifaceted process.

Such a conclusion is consistent with research in developmental neuroscience, which indicates the developing brain is a highly integrated organ that does not have independently functioning regions to govern cognition, emotion, sociability, and other basic human capacities (see Eichenbaum, 2003; LeDoux, 1996). Rather, brain areas are mutually influential, such that memory function and cognition are affected by the individual's experience of emotion and stress, and the growth of neurobiological self-regulatory capacities in the prefrontal cortex has implications for cognitive, emotional, attentional, and behavioral self-control (for a review, see Thompson, 2008). This means that a focus on cognitive and linguistic skills alone, without concern for children's social and emotional functioning, risks undermining early learning by ignoring important influences on cognitive growth, especially when children are in stressful or challenging living circumstances. Neurobiologically, as well as developmentally, early learning

depends on socioemotional factors of the child.

Such a conclusion is particularly relevant to the economic and social challenges of the 21st century, which focused primarily on the child's cognitive and emotional capability, competence, and confidence. According to these authors, the factors that predict school readiness are the same as those that predict early cognitive development.

Independent of the child's cognitive ability, confidence, prosocial skills, and self-regulation, for their own sake, the child's social and emotional skills are important to achievement. This is especially true for children who live in high-risk or dangerous neighborhoods. As preschoolers, children with early learning problems and skills problems that are not addressed in the classroom (Gilliam, 2000) are at the greatest risk of being identified as having learning difficulties. This is not just a matter of difficulty in learning; it is a matter of difficulty in learning to learn, and in learning to behave, and in learning to be successful.

School readiness is not just a matter of child's competencies and skills; it is a matter of child's social and emotional skills and of the social and emotional environment of the child's life. School readiness is not just a matter of child's cognitive and emotional skills; it is a matter of child's social and emotional skills, and of the social and emotional environment of the child's life.

- About, F. E. (2005). School readiness, P. Glick, & J. L. Alexander (pp. 310-326). In K. L. Alexander, K. L. Alexander, K. L. Alexander, & J. L. Alexander (Eds.), *Its short- and long-term effects on school achievement* (pp. 801-814).
 Birch, S., & Ladd, G. (2000). School adjustment. *Journal of*

depends on socioemotional and motivational influences, and the cognitive capacities of the child.

Such a conclusion is also consistent with emerging ideas from economics, particularly the economic science of human capital development (e.g., Cunha, Heckman, Lochner, & Masterov, 2006; Heckman, 2007). Contrary to earlier work in this field, which focused primarily on IQ as an index of early human capital relevant to workforce capability, contemporary economists have devoted increased attention to the influence of “noncognitive abilities,” including motivation, self-esteem, self-regulation, and perseverance as important features of the human capital necessary for a skilled workforce. According to these economists, these noncognitive abilities are also important contributors to early cognitive achievement, and have their origins in early childhood development.

Independent of whether schools should strive to foster children’s curiosity, self-confidence, prosocial motivation, social skills, and ability to get along with others for their own sake, therefore, a concern with early social and emotional competencies is important to achieving even the core cognitive and linguistic outcomes of school achievement. This is especially true for children at greatest risk of educational failure, who help to account for the early-emergent achievement gap and often live in troubled families, dangerous neighborhoods, poverty, or other conditions of social and emotional challenge. As preschoolers, children from difficult and disadvantaged circumstances show early learning problems coupled with emotional and behavioral difficulties and social skills problems that make it difficult for them to get along with other children in the classroom (Gilliam, 2008). As they enter the primary grades, these children are at greatest risk of being identified as having behavioral problems that are associated with their learning difficulties. To conclude that their school achievement problems are primarily a matter of difficulty in literacy and numeracy skills misses how significantly the emotional, behavioral, motivational, and self-related problems of these children undermine the learning process.

School readiness is multifaceted and unfolds developmentally based on not only the child’s competencies but also the support provided for healthy development in the family and other social institutions that surround the young child. In this light, fostering early school achievement is a matter of ensuring that young children have not only acquired mental skills that prepare them for later learning but also the sense of self, competent social skills, and supportive relationships that will help them succeed—and that families, schools, and communities are well-prepared to help them with these accomplishments.

References

- Aboud, F. E. (2005). The development of prejudice in childhood and adolescence. In J. F. Dovidio, P. Glick, & L. A. Rudman (Eds.), *On the nature of prejudice: Fifty years after Allport* (pp. 310–326). Malden, MA: Blackwell.
- Alexander, K. L., Entwisle, D. R., & Dauber, S. L. (1993). First grade classroom behavior: Its short- and long-term consequences for school performance. *Child Development, 64*, 801–814.
- Birch, S., & Ladd, G. W. (1997). The teacher–child relationship and children’s early school adjustment. *Journal of School Psychology, 35*, 61–79.

- Bowman, B. T., Donovan, M. S., & Burns, M. S. (Eds.). (2000). *Eager to learn: Educating our preschoolers* (Report of the Committee on Early Childhood Pedagogy, National Research Council). Washington, DC: National Academy Press.
- Bronson, M. B. (2000). *Self-regulation in early childhood: Nature and nurture*. New York: Guilford Press.
- Brooks-Gunn, J., & Duncan, G. J. (1997). The effects of poverty on children. *The Future of Children*, 7, 55–71.
- Buhs, E. S., & Ladd, G. W. (2001). Peer rejection as an antecedent of young children's school adjustment: An examination of mediating processes. *Developmental Psychology*, 37, 550–560.
- Bunge, S. A., & Zelazo, P. D. (2006). A brain-based account of the development of rule use in childhood. *Current Directions in Psychological Science*, 15, 118–121.
- Burchinal, M. R., Peisner-Feinberg, E., Pianta, R., & Howes, C. (2002). Development of academic skills from preschool through second grade: Family and classroom predictors of developmental trajectories. *Journal of School Psychology*, 40, 415–436.
- Burhans, K. K., & Dweck, C. S. (1995). Helplessness in early childhood: The role of contingent worth. *Child Development*, 66, 1719–1738.
- California Department of Education. (2008). *California preschool learning foundations: Vol. 1. Social-emotional development, language and literacy, English-language development, mathematics*. Sacramento: Author.
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information processing mechanisms in children's social adjustment. *Psychological Bulletin*, 115, 74–101.
- Cunha, F., Heckman, J. J., Lochner, L., & Masterov, D. V. (2006). Interpreting the evidence on life cycle skill formation. In F. Welch & E. Hanushek (Eds.), *The handbook of the economics of education* (pp. 697–812). Amsterdam: North Holland.
- Denham, S. A. (1998). *Emotional development in young children*. New York: Guilford Press.
- Denham, S. A. (2006). The emotional basis of learning and development in early childhood education. In B. Spodek & O. N. Saracho (Eds.), *Handbook of research on the education of young children* (2nd ed., pp. 85–103). Mahwah, NJ: Erlbaum.
- Denham, S. A., & Weissberg, R. P. (2004). Social-emotional learning in early childhood: What we know and where to go from here? In E. Chesebrough, P. King, T. P. Gullotta, & M. Bloom (Eds.), *A blueprint for the promotion of prosocial behavior in early childhood* (pp. 13–50). New York: Kluwer Academic/Plenum Press.
- Diamond, A., Barnett, W. S., Thomas, J., & Munro, S. (2007). Preschool program improves cognitive control. *Science*, 318, 1387–1388.
- Diamond, A., & Taylor, C. (1996). Development of an aspect of executive control: Development of the abilities to remember what I said and to "do as I say, not as I do." *Developmental Psychobiology*, 29, 315–334.
- Dowsett, C., & Huston, A. (2005, April). The role of social-emotional behavior in school readiness. In G. Duncan (Chair), *Hard skills and socioemotional behavior at school entry: What matters most for subsequent achievement?* Symposium presented to the biennial meeting of the Society for Research in Child Development, Atlanta, GA.
- Duncan, G. J., Claessens, A., & Engel, M. (2005, April). The contributions of hard skills and socioemotional behavior to school readiness in the ECLS-K. In G. Duncan (Chair), *Hard skills and socioemotional behavior at school entry: What matters most for subsequent achievement?* Symposium presented to the biennial meeting of the Society for Research in Child Development, Atlanta, GA.
- Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., et al. (2007). School readiness and later achievement. *Developmental Psychology*, 43, 11428–1446.
- Dunn, J. (1993). *Young children's close relationships: Beyond attachment*. Newbury Park, CA: Sage.
- Dweck, C. S. (2002). *The development of a growth mindset*. *Development of*
- Dweck, C. S., & Leggett, E. C. (1988). *Psychological*
- Eichenbaum, H. (2000). *Memory: A cognitive process analysis*. New York: Guilford Press.
- McConnell, J. L. (2000). *Emotion: A comprehensive handbook* (2nd ed., pp. 1–10). New York: Guilford Press.
- Eisenberg, N., Hofer, C., & Smith, P. D. (1990). *Emotion, development, and psychopathology*. In J. J. Gross (Ed.), *Handbook of emotion* (pp. 1–10). New York: Guilford Press.
- Eisenberg, N., Spinrad, T. L., & Reiser, M. (2006). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Estrada, P., Arsenio, W. B., & Harter, S. (2006). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Fox, N., & Calkins, D. D. (2006). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Giles, J. W., & Heyman, S. L. (2006). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Gilliam, W. S. (2008). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Goncu, A. (1993). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Gottman, J. M. (1988). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Hamre, B. K., & Pianta, R. C. (2006). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Harris, P. (2006). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- R. Siegler (Vol. 1). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Harter, S. (1999). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Harter, S. (2006). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Harter, S., & Pike, R. (1990). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Hartup, W. W. (1996). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Hartup, W. W. (1999). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Hartup, W. W. (2006). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Heckman, J. J. (2007). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Heyman, G. D., & Gershoff, E. T. (2002). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Heyman, G. D., & Gershoff, E. T. (2006). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Howes, C. (1987). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Howes, C. (1988). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Howes, C. (1992). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Howes, C. (1999). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Howes, C. (2006). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Howes, C., & P. R. Shaver (Eds.). (1999). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.
- Howse, R. B., Lange, D., & P. R. Shaver (Eds.). (1999). *Emotion, development, and psychopathology*. In M. Killen & M. T. H. Chi (Eds.), *Emotion, development, and psychopathology* (pp. 1–10). Mahwah, NJ: Erlbaum.

- Dweck, C. S. (2002). The development of ability conceptions. In A. Wigfield & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 57–88). San Diego, CA: Academic Press.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, *95*, 256–273.
- Eichenbaum, H. (2003). Learning and memory: Brain systems. In L. R. Squire, F. E. Bloom, S. K. McConnell, J. L. Roberts, N. C. Spitzer, & M. J. Zigmond (Eds.), *Fundamental neuroscience* (2nd ed., pp. 1299–1327). New York: Academic Press.
- Eisenberg, N., Hofer, C., & Vaughan, J. (2007). Effortful control and its socioemotional consequences. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 287–306). New York: Guilford Press.
- Eisenberg, N., Spinrad, T. L., & Sadovsky, A. (2006). Empathy-related responding in children. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (pp. 517–549). Mahwah, NJ: Erlbaum.
- Estrada, P., Arsenio, W. F., Hess, R. D., & Holloway, S. D. (1987). Affective quality of the mother-child relationship: Longitudinal consequences for children's school-relevant cognitive functioning. *Developmental Psychology*, *23*, 210–215.
- Fox, N., & Calkins, S. (2003). The development of self-control of emotion: Intrinsic and extrinsic influences. *Motivation and Emotion*, *27*, 7–26.
- Giles, J. W., & Heyman, G. D. (2005). Preschoolers use trait-relevant information to evaluate the appropriateness of an aggressive response. *Aggressive Behavior*, *31*, 498–509.
- Gilliam, W. S. (2008). *Implementing policies to reduce the likelihood of preschool expulsion* (FCD Policy Brief No. 7). New York: Foundation for Child Development.
- Goncu, A. (1993). Development of intersubjectivity in the dyadic play of preschoolers. *Early Childhood Research Quarterly*, *8*, 99–116.
- Gottman, J. M. (1983). How children become friends. *Monographs of the Society for Research in Child Development*, *48*(Serial No. 201).
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, *72*, 625–638.
- Harris, P. (2006). Social cognition. In W. Damon & R. M. Lerner (Series Eds.) & D. Kuhn & R. Siegler (Vol. Eds.), *Handbook of child psychology: Vol. 2. Cognition, perception, and language* (6th ed., pp. 811–858). New York: Wiley.
- Harter, S. (1999). *The construction of the self: A developmental perspective*. New York: Guilford Press.
- Harter, S., & Pike, R. (1984). The pictorial scale of perceived competence and social acceptance for young children. *Child Development*, *55*, 1969–1982.
- Hartup, W. W. (1996). The company they keep: Friendships and their developmental significance. *Child Development*, *67*, 1–13.
- Heckman, J. J. (2007). The economics, technology, and neuroscience of human capability formation. *Proceedings of the National Academy of Sciences USA*, *104*, 13250–13255.
- Heyman, G. D., & Gelman, S. A. (2000). Preschool children's use of trait labels to make inductive inferences. *Journal of Experimental Child Psychology*, *77*, 1–19.
- Howes, C. (1987). Social competence with peers in young children: Developmental sequences. *Developmental Review*, *7*, 252–272.
- Howes, C. (1988). Peer interaction of young children. *Monographs of the Society for Research in Child Development*, *53*(Serial No. 217).
- Howes, C. (1992). *The collaborative construction of pretend*. Albany: State University of New York Press.
- Howes, C. (1999). Attachment relationships in the context of multiple caregivers. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment* (pp. 671–687). New York: Guilford Press.
- Howse, R. B., Lange, G., Farran, D. C., & Boyles, C. D. (2003). Motivation and self-regulation

- as predictors of achievement in economically disadvantaged young children. *Journal of Experimental Education*, 71, 151-174.
- Hudson, J. (1993). Understanding events: The development of script knowledge. In M. Bennett (Ed.), *The child as psychologist: An introduction to the development of social cognition* (pp. 142-167). New York: Harvester Wheatsheaf.
- Izard, C., Fine, S., Schultz, D., Mostow, A., Adkerman, B., & Youngstrom, E. (2001). Emotion knowledge as a predictor of social behavior and academic competence in children at risk. *Psychological Science*, 12, 18-23.
- Izard, C. E. (2002). Emotion knowledge and emotion utilization facilitate school readiness. *Social Policy Report*, 16, 7.
- Killen, M., Pisacane, K., Lee-Kim, J., & Ardila-Rey, A. (2001). Fairness or stereotypes?: Young children's priorities when evaluating group exclusion or inclusion. *Developmental Psychology*, 37, 587-596.
- Kochanska, G. (1997). Mutually responsive orientation between mothers and their young children: Implications for early socialization. *Child Development*, 68, 94-112.
- Kochanska, G. (2002). Committed compliance, moral self, and internalization: A mediated model. *Developmental Psychology*, 38, 339-351.
- Kochanska, G., & Knaack, A. (2003). Effortful control as a personality characteristic of young children: Antecedents, correlates, and consequences. *Journal of Personality*, 71, 1087-1112.
- Kopp, C., & Wyer, N. (1994). Self-regulation in normal and atypical development. In D. Cicchetti & S. L. Toth (Eds.), *Disorders and dysfunctions of the self: Rochester Symposium on Developmental Psychopathology* (Vol. 5, pp. 31-56). Rochester, NY: University of Rochester Press.
- Kopp, C. B. (2002). School readiness and regulatory processes. *Social Policy Report*, 16, 11.
- Ladd, G. W., Birch, S. H., & Buhs, E. S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development*, 70, 1373-1400.
- Ladd, G. W., Kochenderfer, B. J., & Coleman, C. C. (1996). Friendship quality as a predictor of young children's early school adjustment. *Child Development*, 67, 1103-1118.
- Ladd, G. W., Kochenderfer, B. J., & Coleman, C. C. (1997). Classroom peer acceptance, friendship, and victimization: Distinct relational systems that contribute uniquely to children's school adjustment? *Child Development*, 68, 1181-1197.
- Lamb, M. E. (1998). Nonparental child care: Context, quality, correlates. In W. Damon (Ed.) & I. E. Sigel & K. A. Renninger (Vol. Eds.), *Handbook of child psychology: Vol. 4. Child psychology in practice* (5th ed., pp. 73-134). New York: Wiley.
- LaParo, K. M., & Pianta, R. C. (2000). Predicting children's competence in the early school years: A meta-analytic review. *Review of Educational Research*, 70, 443-484.
- LeDoux, J. E. (1996). *The emotional brain*. New York: Simon & Schuster.
- Lewit, E. M., & Baker, L. S. (1995). School readiness. *The Future of Children*, 5, 128-139.
- MacTurk, R. H., & Morgan, G. A. (Eds.). (1995). *Mastery motivation: Origins, conceptualizations, and applications*. Norwood, NJ: Ablex.
- Marsh, H., Ellis, L., & Craven, R. (2002). How do preschool children feel about themselves?: Unraveling measurement and multidimensional self-concept structure. *Developmental Psychology*, 38, 376-393.
- Marvin, R. S., & Britner, P. A. (1999). Normative development: The ontogeny of attachment. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 44-67). New York: Guilford Press.
- McClelland, M. M., Morrison, F. J., & Holmes, D. L. (2000). Children at risk for early academic problems: The role of learning-related social skills. *Early Childhood Research Quarterly*, 15, 307-329.
- Measelle, J., Ablow, J., Cowan, P., & Cowan, C. (1998). Assessing young children's views of their academic, social, and emotional development. In M. E. Lamb, D. Cicchetti, & M. Beeghly (Eds.), *Developmental psychopathology: A perspective on the first five years of life* (pp. 145-162). New York: Guilford Press.
- Berkeley Puppet Institute (1993). *Understanding children's social interactions: A national study of school psychologists*. Washington, DC: National Center for Educational Research on children's reading.
- National Center for Early Childhood Development (1993). *School readiness: A national report to the U.S. Department of Education*. Washington, DC: National Education Goals Panel.
- National School Readiness Initiative (1993). *National School Readiness Initiative: A nation of learners*. Washington, DC: National School Readiness Initiative.
- Nelson, K. (1993). *Event knowledge and affect in development*. Hillsdale, NJ: Erlbaum.
- NICHD Early Child Care Research Network (2002). *Early child care and school readiness: The link between the two*. Washington, DC: NICHD.
- NICHD Early Child Care Research Network (2002). *Early child care and school readiness: A national report to the U.S. Department of Education*. Washington, DC: NICHD.
- Parker, J. G., & Gottman, I. M. (Eds.). (1993). *Friendship in childhood*. New York: Guilford Press.
- Pianta, R. C., Nimetz, J., & Richman, N. (Eds.). (1993). *Research Quarterly: Early childhood relationships, an early childhood research quarterly*. Washington, DC: NICHD.
- Pianta, R. C., & Stuhlman, P. (1998). *Classroom peer relationships and school adjustment: A developmental perspective*. Washington, DC: NICHD.
- Pianta, R. C., & Stuhlman, P. (1998). *The first years of school: A developmental perspective*. Washington, DC: NICHD.
- Pomerantz, E. M., & Ruben, K. H. (1998). *Understanding conflict: Children's views of their academic, social, and emotional development*. Washington, DC: NICHD.
- Raver, C. C. (2002). *Classroom peer relationships and school adjustment: A developmental perspective*. Washington, DC: NICHD.
- Raver, C. C., & Knitzer, J. (Eds.). (2002). *Strategies to promote school readiness in young children*. Washington, DC: NICHD.
- Renninger, K. A., & Hill, S. (Eds.). (1993). *Understanding children's social interactions: A national study of school psychologists*. Washington, DC: National Center for Educational Research on children's reading.
- Rimm-Kaufman, S. I., & Pianta, R. C. (2002). *Early child care and school readiness: A national report to the U.S. Department of Education*. Washington, DC: NICHD.
- Rubin, K. H., Bukowski, W. M., & Hastings, P. (1993). *Understanding children's social interactions: A national study of school psychologists*. Washington, DC: National Center for Educational Research on children's reading.

- their academic, social, and emotional lives: An evaluation of the self-perception scales of the Berkeley Puppet Interview. *Child Development*, 69, 1556–1576.
- Morrison, E. F., Rimm-Kauffman, S., & Pianta, R. C. (2003). A longitudinal study of mother-child interactions at school entry and social and academic outcomes in middle school. *Journal of School Psychology*, 41, 185–200.
- National Center for Education Statistics. (1993). *Public school kindergarten teachers' views on children's readiness for school* (NCES 93-410). Washington, DC: U.S. Department of Education.
- National Center for Education Statistics. (1994). *National Household Education Survey of 1993: School readiness data file user's manual* (NCES 94-193). Washington, DC: U.S. Department of Education.
- National Education Goals Panel. (1997). *The National Education Goals Report, 1997: Building a nation of learners*. Washington, DC: U.S. Government Printing Office.
- National School Readiness Indicators Initiative. (2005). *Getting ready: Findings from the National School Readiness Indicators Initiative*. Providence: Rhode Island Kids Count.
- Nelson, K. (1993). Events, narratives, memory: What develops? In C. Nelson (Ed.), *Memory and affect in development: Minnesota Symposia on Child Psychology* (Vol. 26, pp. 1–24). Hillsdale, NJ: Erlbaum.
- NICHD Early Child Care Research Network. (2003). Do children's attention processes mediate the link between family predictors and school readiness? *Developmental Psychology*, 39, 581–593.
- NICHD Early Child Care Research Network. (2005). Predicting individual differences in attention, memory, and planning in first graders from experiences at home, child care, and school. *Developmental Psychology*, 41, 99–114.
- Parker, J. G., & Gottman, J. M. (1989). Social and emotional development in a relational context: Friendship interaction from early childhood to adolescence. In T. J. Berndt & G. W. Ladd (Eds.), *Peer relations in child development* (pp. 15–45). New York: Wiley.
- Pianta, R. C., Nimetz, S. L., & Bennett, E. (1997). Mother-child relationships, teacher-child relationships, and school outcomes in preschool and kindergarten. *Early Childhood Research Quarterly*, 12, 263–280.
- Pianta, R. C., Steinberg, M. S., & Rollins, K. B. (1995). The first two years of school: Teacher-child relationships and deflections in children's classroom adjustment. *Development and Psychopathology*, 7, 295–312.
- Pianta, R. C., & Stuhlman, M. W. (2004a). Conceptualizing risk in relational terms: Associations among the quality of child-adult relationships prior to school entry and children's developmental outcomes in first grade. *Educational and Child Psychology*, 21, 32–45.
- Pianta, R. C., & Stuhlman, M. W. (2004b). Teacher-child relationships and children's success in the first years of school. *School Psychology Review*, 33, 444–458.
- Pomerantz, E. M., Ruble, D. N., Frey, K. S., & Greulich, F. (1995). Meeting goals and confronting conflict: Children's changing perceptions of social comparison. *Child Development*, 66, 723–738.
- Raver, C. C. (2002). Emotions matter: Making the case for the role of young children's emotional development for early school readiness. *Social Policy Report*, 16, 3–18.
- Raver, C. C., & Knitzer, J. (2002). *Ready to enter: What research tells policymakers about strategies to promote social and emotional school readiness among three- and four-year-old children*. New York: National Center for Children in Poverty.
- Renninger, K. A., Hidi, S., & Krapp, A. (Eds.). (1992). *The role of interest in learning and development*. Hillsdale, NJ: Erlbaum.
- Rimm-Kaufman, S. E., Pianta, R. B., & Cox, M. J. (2000). Teachers' judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly*, 15, 147–166.
- Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer interactions, relationships, and

- groups. In W. Damon & R. M. Lerner (Eds.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (6th ed., pp. 571–645). New York: Wiley.
- Rubin, K. H., Coplan, R. J., Chen, X., Buskirk, A. A., & Wojslawowicz, J. C. (2005). Peer relationships in childhood. In M. H. Bornstein & M. E. Lamb (Eds.), *Developmental science: An advanced textbook* (5th ed., pp. 469–512). Mahwah, NJ: Erlbaum.
- Scott-Little, C., Kagan, S. L., & Frelow, V. S. (2006). Conceptualization of readiness and the content of early learning standards: The intersection of policy and research? *Early Childhood Research Quarterly*, 21, 153–173.
- Shaw, D. S., Gilliom, M., & Ingoldsby, E. M. (2003). Trajectories leading to school-age conduct problems [Special issue: Violent children]. *Developmental Psychology*, 39, 189–200.
- Smiley, P. A., & Dweck, C. S. (1994). Individual differences in achievement goals among young children. *Child Development*, 65, 1723–1743.
- Stipek, D. (1995). The development of pride and shame in toddlers. In J. P. Tangney & K. W. Fischer (Eds.), *Self-conscious emotions* (pp. 237–252). New York: Guilford Press.
- Stipek, D., Recchia, S., & McClintic, S. (1992). Self-evaluation in young children. *Monographs of the Society for Research in Child Development*, 57(Serial No. 226).
- Thompson, R. A. (1990). Emotion and self-regulation. In R. A. Thompson (Ed.), *Socioemotional development: Nebraska Symposium on Motivation* (Vol. 36, pp. 383–483). Lincoln: University of Nebraska Press.
- Thompson, R. A. (1998). Empathy and its origins in early development. In S. Braten (Ed.), *Inter-subjective communication and emotion in early ontogeny* (pp. 144–157). Cambridge, UK: Cambridge University Press.
- Thompson, R. A. (2002). The roots of school readiness in social and emotional development. *Kauffman Early Education Exchange*, 1, 8–29.
- Thompson, R. A. (2006). The development of the person: Social understanding, relationships, self, conscience. In W. Damon & R. M. Lerner (Eds.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (6th ed., pp. 24–98). New York: Wiley.
- Thompson, R. A. (2008). The psychologist in the baby. *Zero to Three*, 28(5), 5–12.
- Thompson, R. A. (2008, December). Connecting neurons, concept, and people: Brain development and its implications. In National Institute for Early Education Research (Ed.), *NIEER Preschool Policy Brief*, issue 17.
- Thompson, R. A., Goodvin, R., & Meyer, S. (2006). Social development: Psychological understanding, self understanding, and relationships. In J. L. Luby (Ed.), *Handbook of preschool mental health: Development, disorders, and treatment* (pp. 3–22). New York: Guilford Press.
- Thompson, R. A., & Lagatutta, K. (2006). Feeling and understanding: Early emotional development. In K. McCartney & D. Phillips (Eds.), *The Blackwell handbook of early childhood development* (pp. 317–337). Oxford, UK: Blackwell.
- Thompson, R. A., Meyer, S., & McGinley, M. (2006). Understanding values in relationship: The development of conscience. In M. Killen & J. Smetana (Eds.), *Handbook of moral development* (pp. 267–297). Mahwah, NJ: Erlbaum.
- Thompson, R. A., & Raikes, H. A. (2007). The social and emotional foundations of school readiness. In D. F. Perry, R. F. Kaufmann, & J. Knitzer (Eds.), *Social and emotional health in early childhood: Building bridges between services and systems* (pp. 13–35). Baltimore: Brookes.
- Tremblay, R. E. (2000). The development of aggressive behaviour during childhood: What have we learned in the past century? *International Journal of Behavioral Development*, 24, 129–141.
- Wellman, H. (2002). Un- U. Goswami (Ed.), *I UK: Blackwell.*
- Yen, C.-J., Konold, T. R. tive ability as an in 157–169.
- Yoshikawa, H., & Knitz to meet changing ne
- Zelazo, P. D., & Cunnin tion regulation. In J York: Guilford Pres:
- Zelazo, P. D., Müller, U., tion. *Monographs o*

Handbook of child development, 6th ed., pp. 571–645).

C. (2005). Peer relationships in developmental science: A review.

of readiness and the role of research? *Early Childhood Research Quarterly*, 20, 1–15.

to school-age conduct disorder. *Journal of Abnormal Child Psychology*, 39, 189–200.

ent goals among young children. *Journal of Applied Developmental Psychology*, 24, 1–15.

P. Tangney & K. W. O'Leary (Eds.), *Handbook of emotion regulation*. Guilford Press.

children. *Monographs of the Society for Research in Child Development*, 68(2), 1–15.

pson (Ed.), *Socioemotional development*. Lincoln: University of Nebraska Press. pp. 383–483).

S. Braten (Ed.), *Interactions in early childhood*. Cambridge, UK: Cambridge University Press. pp. 1–157).

emotional development. *Journal of Applied Developmental Psychology*, 24, 1–15.

standing, relationships, and social skills. Berg (Vol. Ed.), *Handbook of child development* (6th ed., pp. 1–15).

8(5), 5–12.

people: Brain development. Research (Ed.), *NIEER Research Report*, 1–15.

t: Psychological understanding. *Handbook of preschool development*. New York: Guilford Press. pp. 1–15.

arly emotional development. *Book of early childhood development*. pp. 1–15.

lues in relationship: The role of research. *Book of moral development*. pp. 1–15.

l foundations of school-age emotional health. *Journal of Applied Developmental Psychology*, 24, 1–15. Baltimore: Johns Hopkins University Press.

g childhood: What have we learned. *Moral Development*, 24, 1–15.

Wellman, H. (2002). Understanding the psychological world: Developing a theory of mind. In U. Goswami (Ed.), *Handbook of childhood cognitive development* (pp. 167–187). Oxford, UK: Blackwell.

Yen, C.-J., Konold, T. R., & McDermott, P. A. (2004). Does learning behavior augment cognitive ability as an indicator of academic achievement? *Journal of School Psychology*, 42, 157–169.

Yoshikawa, H., & Knitzer, J. (1997). *Lessons from the field: Head Start mental health strategies to meet changing needs*. New York: National Center for Children in Poverty.

Zelazo, P. D., & Cunningham, W. A. (2007). Executive function: Mechanisms underlying emotion regulation. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 135–158). New York: Guilford Press.

Zelazo, P. D., Müller, U., Frye, D., & Marcovitch, S. (2003). The development of executive function. *Monographs of the Society for Research in Child Development*, 68(Serial No. 274).