CHAPTER 1

Theoretical Perspectives on the Microsystem

In this chapter, Deborah Stipek and Penny Hauser-Cram and her colleagues describe how children's interactions in the family and classroom contexts relate to their social and cognitive development and educational experiences. These interactions are important considerations in understanding family educational engagement, as Stipek and Hauser-Cram and colleagues demonstrate below. As Stipek argues, children's motivation to learn can be greatly influenced by both teachers' and parents' praise and criticism. Hauser-Cram and colleagues describe how children's social-emotional regulation can contribute to parents' stress levels and how parents' interactions with their children can contribute to the children's social and cognitive growth. Although we present these theoretical perspectives as tools that may be used to interpret and analyze the cases in the next chapter, they may also be useful in interpreting other situations.

Motivation to Learn

Deborah Stipek

Children do not learn unless they exert effort on academic tasks. At a minimum, they need to pay attention to and complete tasks. Ideally, they enjoy learning, seek challenging tasks, and take pride in their accomplishments. Researchers have found many advantages for children who enjoy learning compared with those who do schoolwork because they feel they must or who work to achieve extrinsic rewards (e.g., high grades) or avoid punishment (e.g., low grades). For example, children who enjoy learning for its own sake seem to learn at more conceptual levels, seek intellectual challenges more frequently, and persist longer during difficult tasks than children who focus on external rewards and punishments (Stipek & Seal, 2001).

Teachers, parents, and other caretakers are the most important influences on children's achievement-related beliefs and behavior. Messages about learning and achievement are conveyed through children's interactions with parents and teachers during school-related conversations and tasks. Thus, promoting children's **motivation to learn**, that is, their enjoyment

of and investment in learning, should be a joint venture in which caretakers and teachers play complementary roles.

Teachers can help support and promote children's motivation to learn directly, through effective classroom practice, and indirectly, through conveying information to parents. Teachers must have a solid understanding of motivation theory so they are able to develop effective educational practices and provide parents with strategies to support children's motivation to learn.

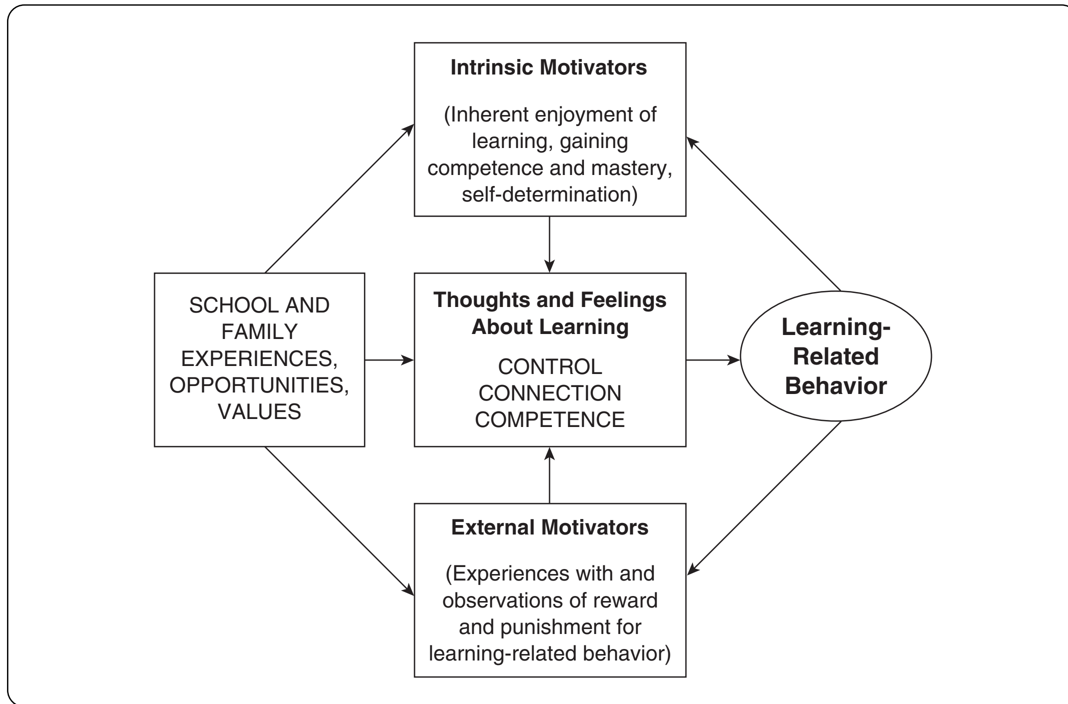
Theoretical Frameworks for Understanding Children's Motivation to Learn

Theories of motivation emphasize differently the roles of external factors (e.g., rewards and punishments) and internal factors (e.g., thoughts, expectations, intrinsic rewards) on children's educational achievement (Stipek, 2002), as Figure 1.1 illustrates. Historically, coming from behaviorism, we have **reinforcement theory**, which emphasizes the role of external rewards and punishments and has provided powerful tools for influencing children's behavior (Stipek, 2002). Both teachers and parents use external motivators at times. Praise, high grades, and special privileges are common rewards used to encourage desirable behaviors, whereas criticism, loss of privileges, low grades, and disapproval are common punishments used to deter undesirable ones. The effectiveness of a reward or punishment varies, however, according to children's cultural backgrounds and personalities. Public recognition, for example, can serve as a reinforcement for some children but embarrass others. Although external motivators are sometimes necessary and often effective in the short run, researchers have found that they are not effective in producing long-term behavior change or in building children's internal motivation (Kazdin, 1988; Kazdin & Bootzin, 1972; O'Leary & Drabman, 1971).

In the context of constructivist theories, **social cognitive theory**, by contrast, views children as active interpreters of the world, who do more than simply respond to rewards and punishments (Stipek, 2002). Social cognitive theorists propose that children's beliefs, values, expectations, emotions, and other unobservable thoughts and feelings play a central role in achievement motivation and behavior. For example, social cognitive theorists suggest that children's expectations about rewards or punishments (e.g., whether they believe they will be rewarded in a particular setting or situation) determine behavior more than actual past experiences with external motivators. In theory, this should result in more long-term behavior change because the individual is no longer dependent on the presence of external motivators (Mace & Kratochwill, 1988; Shapiro & Cole, 1994).

Intrinsic motivation theory is also consistent with contructivist theories of child development. This theory posits that individuals often find learning new information and skills inherently enjoyable and do not need external rewards or praise for engaging in such behaviors. In fact, researchers have discovered that providing external rewards for such activities can actually undermine interest in those activities by shifting children's attention away from the intrinsic value to the reward itself (Lepper, 1973). Thus, when the reward is removed, children may cease engaging in the behavior that they had previously enjoyed for its own sake.

FIGURE 1.1 Theories of Motivation



The Three *C*s: Competence, Control, and Connection

Clearly, finding ways to optimize and sustain children's intrinsic motivation is critical. Psychological research has helped discover three achievement-related thoughts and feelings (i.e., cognitions) that affect children's motivation to learn: their perceptions of competence, their feelings of control, and their feelings of social connectedness. These cognitions are discussed in more detail in the following paragraphs.

Perceptions of Competence. Feelings of competence, especially of new competencies and accompanying expectations for success, are highly motivating (Bandura, 1977). Feelings of competence contribute to children's desire to engage in academic work and encourage children to seek challenges and persist in the face of difficulty. Feelings of *in*competence and an expectation of failure encourage children to give up and withdraw from academic work. Some children put more energy into trying to avoid looking incompetent (e.g., pretending to understand when they don't; "forgetting" their homework because they don't

think it is correct, even if they did it; giving excuses for poor performance) than they put into trying to succeed. Children feel a sense of competence only when they engage in learning activities that are challenging (so they see their skills and understanding developing) but manageable (effort really does lead to success). Success on easy work does not produce the feelings of competence that energize students to do more, and work that is too difficult engenders discouragement and helplessness. Because the skill levels of children in classrooms vary considerably, providing appropriately challenging instruction for all students requires some level of differentiation of instruction. This is what is meant by "student-centered" instruction. Children also need to be acknowledged for improvement. All children cannot be the best in the class, but all children can improve and thus experience a sense of developing competence if improvement is valued in the classroom.

Feelings of Control. Children enjoy academic work more when they feel that they are doing it because they *want* to, not just because they *have* to. Feelings of control or autonomy are undermined by close monitoring, salient external consequences (e.g., "you'd better get to work or you'll get an F"; "if you read this book, you'll get a certificate for a McDonald's burger"), and a lack of choice. Giving students choice in topics, tasks, how they complete tasks, and when they complete tasks contributes to feelings of control. Being told what to do, how to do it, and when to do it most of the time undermines feelings of control and inhibits children from developing skills in planning and organizing their work.

Feelings of Connectedness. Children do not enjoy learning if they feel disrespected and emotionally disconnected. This applies to any learning context. A close, caring relationship with the teacher and being respected and valued by peers foster higher levels of engagement and learning in the classroom. Children who have close relationships with parents and other caretakers and feel that their perceptions and beliefs are respected are more likely to exert effort and take academic risks than children who perceive their parents as controlling and unsupportive.

Conclusion

Parents, teachers, and other caretakers are the most important influences on children's learning. Learning occurs best when children enjoy it and exert effort in the process. Both parents and teachers can play complementary roles to support and promote learning. They commonly offer extrinsic motivations, such as rewards and punishments; but more importantly, they can optimize a child's intrinsic motivation to learn. A passion for learning is nurtured when teachers and parents provide challenging but manageable tasks that build a child's competence. They can offer choices in academic tasks and thereby support children's feelings of control over their learning. Finally, they can develop a caring and respectful learning context in which children feel a sense of connectedness with adults and peers.

Implications for Educators

Teachers and parents can support or undermine children's perceptions of their competence, feeling of autonomy, and feeling of being secure and well supported. Teachers can provide

parents with tools and strategies that encourage children's internal motivation and complement teachers' work in the classroom.

Cultivate positive and supportive interactions around learning. It is important for children to feel accepted and supported by their caretakers in their educational endeavors both inside and outside of school. Teachers can support parents in developing children's sense of responsibility for schoolwork. Helping children develop and commit to a homework routine and encouraging them to stick to it allows them to feel greater self-determination and reduces their likelihood of negative interactions with parents. In all cases, decisions should be made collaboratively, so the child does not feel that plans are entirely imposed by others. It is also important to develop a positive, caring relationship with children; and it is especially important to find ways to connect personally and show respect for children who are having difficulty in school or who have behavioral problems. These children often develop conflictual relationships with teachers and caretakers that interfere with their learning.

Teachers can help parents support their children's passion for learning in all its forms. They can suggest that parents encourage children's growing interests and passions without undermining their feelings of self-determination. Helping children access additional information about a topic of interest, for example, allows them to maintain a sense of independence and control. However, pressuring or forcing children to engage in learning activities can be counterproductive, even if they are interested in the topic.

Maximize children's feelings of competence. Teachers can work with parents in ways that help children develop and sustain a feeling of competence, which is inherently motivating. Sometimes children do not work hard in school or do not complete homework because they don't believe they can do it. The first task for teachers, then, is to consult with parents to determine how children are feeling about their abilities. It is not easy for teachers to make this determination on their own because children are not always forthright. Some are reluctant to reveal that they don't understand the work, whereas others use that as an excuse when they simply don't want to do the work. Parents can often provide additional insight about the real cause of a child's reluctance, which can help the teacher decide on an appropriate course of action.

Stress learning and effort over performance. Teachers can remind parents to emphasize children's learning over their grades for a number of reasons. First, an emphasis on grades and other forms of external evaluation has been found to undermine students' interest in a topic (Ryan & Grolnick, 1986). By contrast, an emphasis on learning focuses children on their developing competence, which is motivating in its own right. Second, de-emphasizing external evaluation allows children to feel more autonomous and less controlled. Third, if children are doing poorly relative to the rest of the class, an emphasis on learning and effort can minimize feelings of alienation and incompetence, which undermine children's motivation to learn.

When a child is having difficulty with a subject, sometimes parents want an immediate and dramatic improvement in his or her grade. A better approach that teachers can suggest, however, is to emphasize the child's increased effort and gradual, but steady, improvement. This enhances the child's feelings of competence and helps to maintain a focus on learning

rather than grades. Teachers can facilitate this attitude by informing parents of the child's progress in ways that highlight the child's hard work and gains in understanding. Teachers can also provide suggestions to parents for encouraging children's progress in ways that are realistic and most likely to produce long-term improvement.

Use rewards and praise thoughtfully. Rewards can be motivating in the short run, but they can undermine intrinsic motivation and make it less likely that a behavior will occur when the reward is withdrawn. Teachers can explain to parents that rewards and even praise can often feel controlling to children. Thus, when offering a reward, parents can frame it in terms of a choice the child can make freely based on natural consequences (e.g., you can finish your homework now or later, but if you finish it before dinner we will have time to play). In the same vein, praise that makes children feel manipulated should be avoided. Instead, language that emphasizes the child's own autonomy and self-determination should be used.

Inform parents about innovative classroom practices. It is important that teachers explain clearly to parents any innovative classroom practices that are intended to promote children's internal motivation. This is particularly true, for example, when teachers utilize nontraditional forms of evaluation. Parents are most accustomed to using scores, class rank, and grades to judge their children's progress and achievement in school. However, motivation theory suggests that such comparative assessments may undermine some children's internal motivation. Thus, if teachers choose to modify their ways of evaluating students, they must also be prepared to explain and justify their reasons for doing so. At a minimum, they must help parents to understand alternative forms of feedback so they can continue to understand their children's progress. Keeping parents informed about such educational practices can prevent misunderstandings and will increase home-school continuity regarding achievement-related messages.

All of these practices can be encouraged and supported at the school level. A school climate that makes parents and other caretakers feel welcomed will give teachers more access to caretakers. This can be accomplished, for example, by making sure that information for parents is provided in a language they understand and also that personnel speak their language. Administrators can reinforce the importance of caretakers' being involved in their children's education by frequent events at the school that provide opportunities to learn about the instructional program and specific ways they can assist their children. In all of these efforts, it is useful to keep in mind that the three *C*s—competence, control, and connection—apply to parents just as much as they apply to children.

A Developmental-Contextual Perspective

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Contemporary psychological research on children with developmental disabilities is beginning to focus on the factors that support development rather than solely describing the ways in which these disabilities may impede development. Our work has focused on skills and

characteristics within the child and within the family that are associated with positive development. These relationships are multidirectional: Family members influence children's development, and children, in turn, affect the well-being of other family members (Minuchin, 1988; Shonkoff & Phillips, 2000). These relationships are also dynamic because changing needs and influences shape the child and family over time (Guralnick, 2005; Lerner, 1991).

From a developmental-contextual perspective, family processes and children's development are mutually interrelated. This theoretical lens considers the bidirectional influences of parents and children upon each other. Research on these relationships provides four important insights for working with children and their families: (a) children promote their own development through processes of self-regulation; (b) family relationships shape child development; (c) children affect parents' well-being and capacity to engage in children's schooling; and (d) despite challenges such as low income, single parenthood, and disability, many families are resilient.

Although this area of research focuses on the relation between the development of children with disabilities and their families, this work identifies processes that appear to be central to the development of *all* children.

The Research

One of the most fruitful ways to examine children's development is through empirical studies that gather information over time. Such longitudinal studies can help researchers better understand the pathways of child development, examine the degree to which development can be influenced by interventions, and understand how changes in the child and family affect each other. In this chapter, we present findings from the Early Intervention Collaborative Study, a longitudinal study of children with biologically based disabilities and their families (Hauser-Cram et al., 2001). This research, which followed children from infancy until age 10, has revealed important information about the reciprocal influences of child development and parent well-being over time (Hauser-Cram et al., 2001; Shonkoff, Hauser-Cram, Krauss, & Upshur, 1992).

Children act as agents of their own development. One of the most important ways children advance or impede their own development is through **self-regulation**, which is the capacity to modulate one's behavior in accordance with environmental demands. Children who can control their emotions and actions well during intellectual challenges or frustrating situations show developmental advantages over those with poorer self-regulation skills (Bronson, 2000; Eisenberg, Smith, Sadovsky, & Spinard, 2004). We found two areas of self-regulation to predict positive developmental change in children with disabilities. One manifestation of self-regulation is **mastery motivation**, which is present when a child persists at a problem-posing task even when the task is quite challenging (e.g., matching unusual shapes, completing a complex puzzle, working a multistep musical device). Our research found that preschool children with high mastery motivation made greater gains throughout the middle childhood years, especially in cognitive growth. Cognitive growth, in turn, led to positive changes in other areas of development such as social, communication, and daily living skills.

The second aspect of self-regulation is **social-emotional regulation**, which is the ability to manage socially appropriate behavior during frustrating or demanding situations. When children have difficulty regulating their emotions, they exhibit behavior problems such as tantrums, defiance, and withdrawal. We found that children who exhibited these behaviors in their early childhood classrooms displayed less positive change in cognitive performance through the middle childhood period. Thus, both types of self-regulation (i.e., mastery motivation and social-emotional regulation) contribute to children's cognitive growth.

How does self-regulation relate to children's development at different ages? Preschool-aged children gradually become more goal-oriented and monitor their actions more effectively (Bullock & Lutkenhaus, 1988). They also begin to evaluate the success or failure of their actions more accurately (Stipek, Recchia, & McClintic, 1992). As they persist in their goals, young children learn to correct their actions and, as a consequence, experience the rewards of successful performance. As children persist, self-correct, and evaluate the results of their efforts, they benefit emotionally from developing mastery and cognitively from understanding their errors. In this way, children promote their own developmental progress (Bandura, 1977).

Children with better social-emotional self-regulation also are more engaged in growth-promoting activities with their peers, less involved in disputes with others, and able to take advantage of the classroom experience in a way that helps them advance cognitively (Hauser-Cram et al., 2001).

Family relationships shape child development. Family relationships, however, also contribute to child outcomes. We found that preschool children whose mothers interacted more positively with them during a teaching task displayed greater growth in cognitive performance, communication, and social skills in later childhood. Likewise, children whose families had more positive relationships with each other experienced more growth in their social skills. Taken together, these findings demonstrate that both children's self-regulation and positive family relationships are important to children's development.

Children affect parent well-being. Having a child with a disability presents parents with new and unexpected challenges. A number of factors affect how parents adapt to their child with a disability, including their coping skills and sources of social support. Parent well-being includes parents' satisfaction with and adaptation to the child's temperament and behaviors as well as their emotional resources and adjustment to the parenting role.

We found that as children developed from infancy to age 10, fathers' and mothers' stress levels increased considerably. Fathers displayed higher levels of stress than mothers when the child was in the infant and toddler years and had more moderate increases thereafter. Mothers, on the other hand, showed a continuous increase in stress levels over time. Both mothers and fathers experienced higher levels of stress when their children exhibited poor social-emotional self-regulation. However, certain factors reduced parental stress. Specifically, mothers' stress levels were lower when they had strong social support networks, whereas fathers' stress levels were lower when they had greater problem-focused coping skills.

Many families are resilient. Despite the multiple challenges faced by family members when a child has a disability as well as when a family encounters economic and other critical

stressors, many families emerge as quite resourceful (Shonkoff & Phillips, 2000). The concept of resilience—the ability to rebound from crises and challenges—is important to recognize when working with families (Walsh, 2003). Although in the past a child's disability was often considered a "risk" factor leading to poor family functioning, our research shows that most families function well in supporting their child with a disability. While not ignoring those who are less resilient, a strengths-based understanding of families and their challenges, including single parenthood (Murry, Bynum, Brody, Willert, & Stephens, 2001), provides a greater understanding of the potential for positive and adaptive functioning when parenting a child with a disability.

Conclusion

Our research examined the bidirectional relations between child and parent characteristics and the influences of child and family processes. Children, to some extent, advance their own development through self-regulatory processes. Family processes—high-quality mother-child interactions and parent assets (e.g., problem-focused coping skills and social supports)—are also critical components of improved development in children with disabilities and parent well-being. Finally, regardless of family structure, many families are quite resilient and resourceful in their support of a child who exhibits developmental challenges. These processes govern the development of children with and without developmental disabilities.

Implications for Educators

Develop family-focused services. When families move from early intervention programs to school-based services, they experience a shift from a family-focused to a child-focused system. In view of the higher levels of stress that parents experience as their children grow into and through middle childhood, schools should pay greater attention to the mental health of children and their parents, especially during early and middle childhood (Knitzer, 2000). Neglecting the behavioral needs of children and the mental health needs of parents may have long-term negative consequences for families, especially as children enter the adolescent period.

Tailor different types of supports for fathers and mothers. Different types of parent assets (e.g., social support for mothers and problem-focused coping skills for fathers) predict changes in parents' well-being over time. School services can help connect mothers with opportunities for social support. For mothers who can easily access their child's school, activities such as "make and take" workshops and discussions held by parent advisory boards about special education and other services may prove meaningful. Similarly, services that support the problem-focused styles of fathers may serve to improve their well-being over time. For example, fathers' clubs that advance father involvement in schools may provide an important avenue for fathers to understand the needs of the school and problem-solve with others about those needs. For all families, school personnel could provide information about community organizations and services—such as the Family Voices Family-to-Family Information

Centers—that will link a parent to other parents who have a child with a similar disability or health care need.

Initiate teacher professional development that focuses on the family system in child development. All those who work with children (with and without disabilities) need to acquire knowledge about the contexts of child development, and especially the role of families, so that they can promote children's self-regulatory processes and positive parent-child interactions. Knowledge of the multiple and changing facets of the family system is vital to teacher collaboration with families. Teachers and service providers might benefit from a collection of case examples in which potential collisions between families and practitioners were averted. In addition, it would be beneficial to provide examples in which teachers and other service providers have revised standard practices in ways that support families and benefit children (Hauser-Cram & Howell, 2003). Finally, while acknowledging the challenges faced by a family, teachers can also acknowledge and build on the strengths that a family brings to those challenges.