


DEVELOPMENTAL PSYCHOLOGY
AN ADVANCED TEXTBOOK

FOURTH EDITION

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 LAWRENCE ERLBAUM ASSOCIATES, PUBLISHERS
1999 Mahwah, New Jersey London

School and Community Influences on Human Development

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INTRODUCTION

In 1979, Bronfenbrenner published the first of a series of documents charging developmental psychology with the need to study human development from a broader contextual viewpoint. He stressed that humans develop within a set of embedded contexts of influence beginning with their own biological makeup and ending with the political/historical contexts into which they are born and raised. Bronfenbrenner stressed that we cannot understand child development without understanding the forces that operate at each of these levels. Although it is true that children are most directly influenced by their immediate, face-to-face interactions with other human beings, particularly their parents, peers, and teachers, these face-to-face interactions are shaped and molded by forces in the larger societal context. For example, workplace experiences affect parents' mental health and economic resources, which, in turn, affect their parenting behaviors. Similarly, neighborhoods both structure the types of opportunities and risks children are exposed to whenever they leave their home and influence parenting practices whenever parents adapt their behaviors to the realities outside the home. Finally, schools are elaborate multilevel institutions that influence children's development in a variety of ways—ranging from the ways in which they influence teacher–student interaction patterns to the ways in which they either do or do not involve parents.

Since 1979, there has been growing interest in the influences of extra-familial contexts on human development. Researchers have begun looking at a variety of contexts including neighborhood, community, and school, as well as larger cultural, historical, political, and societal forces. In this chapter, we focus on two of these contexts: schools and communities. Children and adolescents spend many of their waking hours in either schools or various community-based settings (such as churches, playgrounds, and neighborhood streets); increasingly so as they get older. Although these extra-familial settings provide both opportunities and risks for development, they have received amazingly

little research attention by developmental psychologists. Most of the existing work has been done by educational psychologists and sociologists. In this chapter, we review the work from all these disciplines in the hopes of stimulating more work on these influences by the next generation of developmental psychologists.

Schools hold a central place in the developmental agenda set forth for children in almost all nations. They are the longest organized and sustained extra-familial context for children and adolescents: From the time they first enter school until they complete their formal schooling, children and adolescents spend more time in schools than any other place outside their homes. Consequently, educational institutions play a central role in both promoting children's acquisition of knowledge and shaping the ways in which they learn to regulate their attention, emotions, and behavior. Exploring all of the possible ways in which educational institutions influence development is beyond the scope of a single chapter. In this chapter, we focus on the ways in which schools either promote children's developmental competence or reinforce developmental difficulties. First, we describe the school as a multilevel context that influences children's socioemotional and behavioral development through organizational, social, and instructional processes that operate at several different levels. These levels range from the immediate, proximal relation between students and the tasks they are asked to perform to the role of the principal and the school board in setting school-level policies, which, in turn, influence the social organization of the entire school community. Then we discuss in greater depth two examples of how these multilevel influences work together to encourage development through their effect on the daily experiences of children and adolescents as they enter and pass through the school system. The first example focuses on the transition into elementary school, the second on the transition from elementary school into either junior high school or middle school.

Developmental psychology's interest in community and neighborhood influences is even more recent than its interest in schools. It was extremely rare to find an article on neighborhood influences in any of the major developmental psychology journals 10 years ago. Although such articles are still unusual, there has been a dramatic rise in their prevalence over the last several years. Much of this increase reflects growing concerns with children growing up in poverty. In 1987, a sociologist, William Julius Wilson, published a very influential book, *The Truly Disadvantaged*, which spotlighted the potential role of neighborhood effects on human development. Since then, various interdisciplinary teams of researchers (see, e.g., the works summarized by Brooks-Gunn, Duncan, & Aber, 1997a, 1997b) have initiated large-scale projects to study the impact of neighborhood and community forces on human development. We summarize the initial results coming out of this new work later in the chapter.

We end the chapter discussing how the school and the community affect development through their influence on peer groups and the opportunities for participation in organized activities. Schools and communities have a large influence on the nature of the peers with whom individuals spend the most time. Schools also structure the nature of these interactions through grouping and instructional practices. We elaborate on these influences. We then summarize the indirect influence of schools and communities on children's and adolescents' involvement in community-based and after-school extracurricular activities. Children and adolescents spend a great deal of time out of school. As they get older, much of this time is spent outside the home. Does it matter what they do during this time? Does participating in organized activities such as team sports, volunteer service, or faith-based activities influence socioemotional development? We summarize the research regarding these questions at the end of the chapter.

SCHOOLS AND HUMAN DEVELOPMENT

Despite an increasing recognition that schools play a critical role in children's cognitive and social development, our understanding of the impact of the ecology of either the classroom or the school as a whole is minimal. Recently, researchers interested in schools have looked beyond the intellectual domain to examine how experiences in classrooms and schools influence children's feelings, identity beliefs, and behavioral choices (Rutter, 1983). For the most part, developmental researchers focus on the family and the peer group rather than schools; in contrast, educational researchers focus on the impact of schools on intellectual rather than socioemotional outcomes (Eccles, Lord, & Roeser, 1996). Although there are important exceptions to this characterization, the continuing lack of interdisciplinary collaboration among researchers interested in school effects on children has been noted by several scholars (Eccles et al., 1997; Finn, 1989; Speece & Keogh, 1996). Instead, researchers in education, psychology, psychiatry, and sociology have worked independently and used a variety of approaches to study how schools influence development (e.g., Erikson, 1959; see Brophy & Good, 1974; Eccles, Wigfield, & Schiefele, 1997; Lee, Bryk, & Smith, 1993; Rutter, 1983). Such diversity has made it difficult to compare findings and build an integrated body of knowledge about school effects. In the next section, we briefly review the five major streams of these research efforts. We then summarize a more integrated view of school effects, understanding schools as complex organizations with multiple interacting levels of possible influence.

Five Major Streams of Work on School Influence

School-level resources and structure. Early studies of schools focused primarily on objective characteristics such as school size, teacher-student ratios, number of books in the library, and per-pupil expenditures (Barker & Gump, 1964). School size emerged as one of the most important of these structural characteristics: Both children and their teachers scored better on a wide variety of indicators of successful development if they were in small schools rather than large schools. Otherwise, few systematic relations emerged between structural characteristics and student achievement (Rutter, Maughan, Mortimore, & Ouston, 1979). Recently, this work has been criticized on a number of grounds, including its atheoretical nature, the poor matching of outcome variables with the kinds of content actually taught, and a rather exclusive focus on demographic and economic variables to the exclusion of factors associated with the internal life and culture of the school (Rutter et al., 1979). Just as Bronfenbrenner (1977) stressed the need to go beyond the social addresses of families (e.g., race, socioeconomic status, SES) to examine how different family processes impact development, so school researchers stress the need to go beyond demographic and economic characteristics of schools to examine the organizational, social, and instructional processes in schools that impact development.

Schools as social organizations. A second group of researchers focused on the internal life of the school as a social organization—its values, norms, activities, and everyday routines. Rather than examining the relation of demographic and economic inputs to achievement outputs, these researchers examined the mediating organizational and social processes enacted by teachers, principals, and school staff. These researchers often studied schools that had the reputation of being particularly good or unusually bad. Alternatively, they did intensive studies of school-level interventions designed to

change the school climate (e.g., Brookover, Beady, Flood, Schweitzer, & Wisenbaker, 1979). Using these strategies they demonstrated the advantages of the following types of school-climate-related processes: organizational features of the school such as strong leadership, opportunities for all children to participate in school activities, and strong and clear norms and rules related to order and discipline; sociocultural features such as a sense of community among teachers, students, and staff, and positive teacher expectations; and instructional features such as a press for achievement and an emphasis on clear curricular goals (see Eccles et al., 1997; Lee et al., 1993, for reviews).

Classroom-level practices linked to academic outcomes. A third group of researchers investigated the classroom-level practices that enhance academic outcomes, particularly for children of different ability levels or socioeconomic and ethnic backgrounds. According to Brophy (1988), this line of research demonstrated that "achievement is maximized when teachers: (1) emphasize instruction as basic to their role, (2) expect students to master the curriculum, and (3) allocate most available time to academic activities" (p. 240). This line of research also documented the importance of teachers making clear and consistent rules explained to students early in the year, the structuring of academic lessons to emphasize main ideas that build on each other, instructional provisions for review and reflection, and active supervision of student progress. Teachers' beliefs about the nature of learning, the definition of academic success, the scope of their own role as a teacher, and their beliefs about the subject matter also emerged as important precursors of teachers' decisions regarding instructional pedagogy and classroom practices (Calderhead, 1996).

Classroom-level and psychological influences on motivation. Recently, researchers have investigated the influences on children's achievement motivation. Paralleling advances in ecological approaches to human development in general, several ecological-developmental theories of achievement motivation emerged beginning in the 1970s (see Eccles et al., 1997, for full review). These investigators focused on both psychological and situational forces.

On the psychological level, these researchers focused on three sets of beliefs: expectancy- or efficacy-related beliefs, task value-related beliefs, and personal goals. For example, they documented the powerful influence of children's beliefs about their efficacy and competence in relation to successfully mastering academic work on their engagement in learning tasks and their actual academic achievement (Bandura, 1994; Eccles, 1983). Similarly they documented the fact that children do better on school-related tasks that they enjoy doing and that they think are important. Finally, they documented the influence of both short- and long-term goals on children's engagement and performance in school. Most of the work on short-term goals focused on the goals students have as they are performing school-related tasks. For example, is the child's primary goal in doing a particular assignment to demonstrate that they are smarter or better than the other students in the class or to learn as much as they can from the assignment? In other words, are the students more concerned about demonstrating their ability (or avoiding demonstrating a lack of ability—often labeled an ability-goal focus) or about mastering the material (often labeled a task-mastery focus; e.g., Ames, 1992; Dweck & Elliott, 1983)? These types of studies demonstrated that children with a task-mastery focus learn more from the task, and are more likely to persist following difficulty or failure, than children with an ability-goal focus.

On the situational/contextual level, the researchers studied the impact of specific educational practices on children's beliefs and performance. They hypothesized that

classroom-level educational practices influence achievement indirectly through their impact on achievement-related cognitions and beliefs. For instance, classroom and school-wide practices that make ability-related information salient (e.g., differential expectations, within-class ability groups, public evaluation, honor rolls) were found to exacerbate differences between high and low achievers' self-perceptions of competence, leading to poorer self-images among low achievers (see S. J. Rosenholtz & Simpson, 1984; Stipek, 1996). Furthermore, classroom and school practices that supported children's autonomy and a sense of both meaning and social support were found to influence academic achievement through their positive influence on school-related values, interests, and goals (Ames, 1992; Eccles, 1983; Connell & Wellborn, 1991; Deci & Ryan, 1985; Moos, 1979). In contrast, lack of choice in the classroom, boring tasks, and low teacher support undermined motivation and school behavior—leading to disengagement and withdrawal (Roeser & Eccles, 1998; Skinner & Belmont, 1993).

Person-environment fit. A fifth line of research focused on the fit between the opportunities afforded in various social contexts and the developing child's changing needs and competencies. The researchers doing this work adapted classic person-environment fit theories of successful functioning to a developmentally sensitive, dynamic view of Context \times Person interactions. For example, Hunt (1975) argued that

maintaining a developmental perspective becomes very important in implementing person-environment matching because a teacher should not only take account of a student's contemporaneous needs by providing whatever structure he presently requires, but also view his present need for structure on a developmental continuum along which growth toward independence and less need for structure is the long-term objective. (p. 221)

Hunt thus suggested that teachers need to create and recreate sufficiently challenging learning environments to pull children along a developmental path toward higher levels of cognitive maturity.

There is good reason to believe that the developmental appropriateness of the changing school environment will impact socioemotional development as well. Just as Vygotsky stressed the need for scaffolding within the zone of proximal development for cognitive and emotional development during early life (see Lutz & Sternberg, chapter 7, this volume), several motivational researchers have suggested that a good fit of the school context to the developmental needs and competencies of students is needed for optimal socioemotional and cognitive development. Eccles and colleagues (1993) labeled this type of person-environment fit *stage-environment fit* to capture the idea that there is a link between the developmental appropriateness of the characteristics of any specific social context and the nature of the developmental outcomes obtained in that context. Eccles and colleagues used this approach to study the negative changes in motivation and behavior in school settings often associated with the transition to junior high school. This work is discussed later.

Summary. After almost 40 years of research on schooling, several important principles have emerged. First, although school resources are important, the organizational, social, and instructional processes that occur in schools are more important for understanding the impact of schools on development. Second, school effects operate at different levels: at the level of the school as a whole, in the classroom, and at the interpersonal level. Third, children's perceptions of the school environment are stronger predictors of children's adjustment and adaptation to their school experiences than more

objective indicators of environment such as observers' ratings (see Maehr, 1991; Ryan & Grolnick, 1986; Weinstein, 1989). Finally, school effects on behavior are mediated through various psychological processes at the individual level. These mediating processes include children's achievement-related beliefs and their perceptions of the school context. In the next section, we weave together these principles.

What is missing from these various studies is a systematic attempt to get a holistic view of school influences. By and large, the research described in this section was conducted in a rather piecemeal fashion with each researcher focusing on his or her own particular interests. Schools, however, are complex organizations. Characteristics or decisions at any one level are likely to influence characteristics and practices at all other levels. For example, the decision of the school board to adopt stricter achievement standards for promotion will affect teaching practices and student-teacher interactions throughout the school. If we want to fully understand the impact of school on the development of the children and adults within the school, we need to analyze these effects from a more organizational and integrated perspective. Such a perspective is outlined in the next section.

THE ECOLOGY OF SCHOOL: LEVELS OF ORGANIZATION AND ATTENDANT REGULATORY PROCESSES

Figure 12.1 depicts the school environment as a set of hierarchical and interdependent levels of organization. In this model, we assume that (a) schools are systems characterized by multiple levels of regulatory processes (organizational, social, and instructional in nature); (b) these processes are interrelated across levels of analysis; (c) such processes are usually dynamic in nature, sometimes being worked out each day between the various social actors (e.g., teachers and students); (d) these processes develop or change as

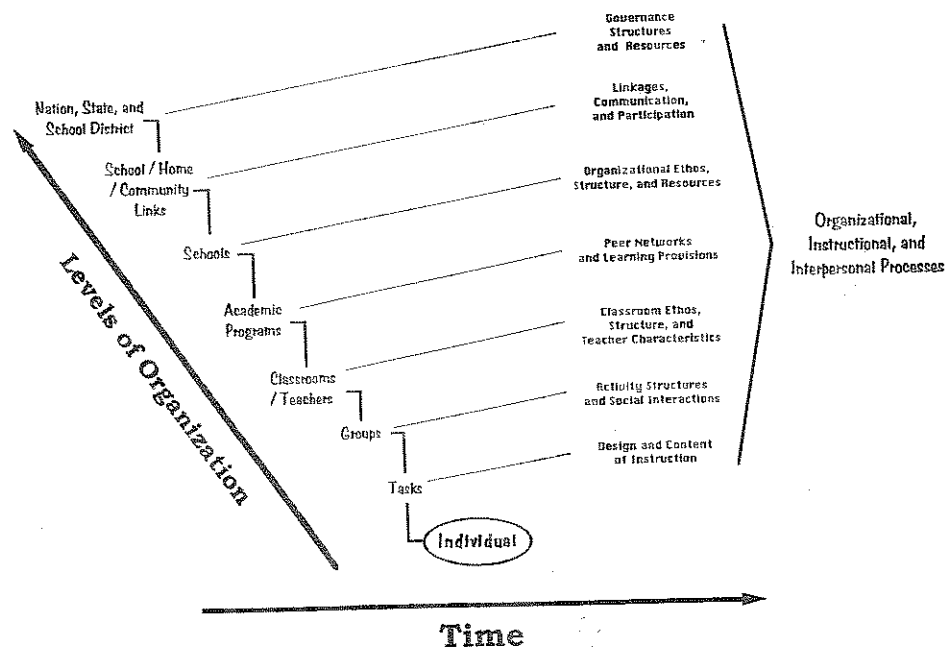


FIGURE 12.1. Descriptive model of the context of schooling: Levels of organization and associated processes.

children move through different school levels (elementary, middle, and high school); and (e) it is these processes that regulate children's cognitive, socioemotional, and behavioral development.

It is important to note here that our subsequent discussion of the model in Figure 12.1 emphasizes the relation of these particular school processes to the child. We do not discuss in any great detail how the school environment influences teachers and the conditions of their work nor do we discuss school resource issues at any length (e.g., expenditures and student composition) although these are important for understanding the broad influence of schools on children. We also acknowledge that children shape the process of schooling though their unique personal capacities and adaptive strivings, but, due to limited space, we do not discuss this important perspective in any great detail.

Assumptions of the Model

Assumption #1. From the location of the school within macroregulatory systems characterized by laws and educational policies of the nation, state, and local school district (e.g., Alexander & Alexander, 1984) down to the miniregulations that involve an individual teacher's eye contact and body language in relation to a particular child (e.g., Brophy & Good, 1974), schools are a system of complex, multilevel, regulatory processes. Figure 12.1 summarizes the specific levels of environmental regulatory processes associated with the impact of schools on children's own self-regulatory capacities and behavior. The different levels of organization in the school environment are ordered hierarchically moving out from the child and include the nature and design of tasks and instruction, the nature and structure of classroom activities and groups, the classroom structure and social ethos, academic tracks, the school organizational structure and ethos, linkages between schools and other institutions in the local community (home, community-based organizations), and location of the school within the district, state, and national governance systems.

Assumption #2. We also assume that in any given school setting, the multilevel processes depicted in Figure 12.1 are interwoven with one another. Relations between different levels of organization in the school may be complementary or contradictory, and may influence children directly or indirectly. For instance, a principal may decide to mandate certain techniques such as cooperative learning (school level), which the teachers are supposed to implement at the class level. If done well, children within specific classrooms in this school would work in groups (group level) on fairly complex, conceptual problems for which cooperative techniques were designed (task level). Such a well-implemented school policy could indirectly lead to increases in self-esteem, interethnic relationships, and achievement among children, especially those of low ability or status (Slavin, 1990). In contrast, if done poorly, chaos could result, leading to far less positive outcomes at the student level.

Alternatively, consider the possible indirect negative effects of school-level mandates to enhance student performance on achievement tests. Mandated testing often leads to the use of particular classroom instructional methods such as drill and practice on test-like items; these practices are often at odds with teachers' own instructional goals and strategies (Smith, 1991). This discrepancy can lead to a dampening of teacher enthusiasm, which, in turn, could undermine students' motivation, effort, and learning (Brophy, 1988). In this example, a well-intended mandate from the nation, state, or district could inadvertently undermine students' performance through its effect on teacher beliefs and practices.

Assumption #3. It is the processes associated with the different levels of school interacting dynamically with each other, rather than static resources or characteristics of the curriculum, teachers, or school that influence children. In addition, children's own construction of meaning and interpretation of events within the school environment are the critical mediators between school characteristics and children's feelings, beliefs, and behavior.

Assumption #4. Finally, we propose that these different school-related processes change across the course of children's development as they progress through elementary, middle, and high school. That is, not only are children developing, but so too is the whole nature of the schools that they attend. The inclusion of a time dimension along the bottom of Figure 12.1 emphasizes this point. For example, Eccles and colleagues found that organizational, social, and instructional processes in schools change as children move from elementary to middle school (see Eccles et al., 1993). These changes are associated with declines in many children's motivational beliefs and behavior. Understanding the interaction of different school features on children at different ages of development is a critical component of understanding the role of schooling in children's development (see Eccles & Midgley, 1989).

In the next section, we describe each of the contextual levels depicted in Figure 12.1 and discuss how their associated processes can influence children's academic and socioemotional functioning. We also summarize what we know about developmental changes in these contextual processes as children progress through different school types (elementary, middle, and high school) and how such contextual changes influence children's development.

Level 1: Academic Tasks and Instruction

Academic work is at the heart of the school experience. Two aspects of academic tasks are important: the content of the curriculum and the design of instruction. The nature of academic content has an important impact on the regulation of children's attention, interest, and cognitive effort. Academic work that is meaningful to the historical and developmental reality of children's experience promotes sustained attention, high investment of cognitive and affective resources in learning, and strong identification with educational goals and aims (Dewey, 1902). Content that provides meaningful exploration is critical given that boredom in school, low interest, and perceived irrelevance of the curriculum are associated with poor attention, diminished achievement, disengagement, and finally, alienation from school (Eccles & Midgley, 1989; Finn, 1989; Larson & Richards, 1989). Curricula that represent the voices, images, and historical experiences of traditionally underrepresented groups is particularly important. The disconnection of traditional curricula from the experiences of these groups can explain the alienation of some group members from the educational process, sometimes eventuating in school dropout (M. Fine, 1991).

The design of instruction also influences children's self-regulation of attention, cognition, motivation, learning, and investment in school (Blumenfeld, 1992; Deci & Ryan, 1985; Dewey, 1902). Choosing materials that provide an appropriate level of challenge for a given class, designing learning activities that require diverse cognitive operations (e.g., opinion, following routines, memory, comprehension), structuring lessons so they build on each other in a systematic fashion, using multiple representations of a given problem, and explicitly teaching children strategies that assist in learning are but a few of the design features that can scaffold learning and promote effort investment, interest in learning, and achievement among children.

From a developmental perspective, there is evidence that the nature of academic work does not change in ways that are concurrent with the increasing cognitive sophistication, diverse life experiences, and identity needs of children and adolescents as they move from the elementary into the secondary school years (Carnegie Council, 1989). As one indication of this, middle school children report the highest rates of boredom when doing schoolwork, especially passive work (e.g., listening to lectures) and in particular classes such as social studies, math, and science (Larson & Richards, 1989). Academic work becomes less, rather than more, complex in terms of the cognitive demands as children move from elementary to secondary school (Rounds & Osaki, 1982). It may be that declines in children's motivation during the transition to secondary school in part reflect academic work that lacks challenge and meaning commensurate with children's cognitive and emotional needs (Eccles & Midgley, 1989).

There is also evidence that the content of the curriculum taught in schools does not broaden to incorporate either important health or social issues that become increasingly salient as children move through puberty and deal with the identity explorations associated with adolescence (Carnegie Council, 1989). For instance, in reflections on the failure of urban schools in Watts, California, to meet the needs of African-American males who eventually dropped out, Glasgow (1980) wrote:

What really made these men angry was the explicit and implicit put-down of those things that were the core of their lives. For instance, Black dance, music, and modes of communication were viewed negatively and characterized as improper. . . . The message of cultural inferiority was conveyed in myriad ways, from outright speech corrections to the omission of everyday Black referents and the absence of Black history in the curriculum. . . . Schools dominated by Whites stressed an Anglo-oriented curriculum and neglected or more often "put-down" ethnic groups' contributions. (pp. 58 & 62)

Although research in this area is still relatively sparse, evidence suggests that as children develop cognitively and take a greater interest in understanding the world and their identity within that world, schools often provide repetitive, low-level tasks that are unimaginative in content and structure. Such changes are likely to undermine motivation in all children as well as to exacerbate motivational and behavioral difficulties in those children who had trouble with academic work earlier in their development.

Level 2: Activity Structures and Groups

The next level of school influence concerns the structure of activities in the classroom. Classroom instruction is delivered through different activity structures, including whole-group instruction, individualized instruction, and small-group instruction. Groups are often formed based on children's ability level; alternatively, groups are sometimes formed from students representing a diverse array of abilities brought together in a cooperative work arrangement (e.g., Slavin, 1990). These different activity structures communicate quite different implicit messages about social relations and children's abilities—messages that, in turn, influence children's perceptions of their own academic competence and their social acceptability. These group structures also elicit varying patterns of differential teachers treatment and peer group associations.

The use of either whole-class instruction or within-class ability groups can highlight ability differences and lead to increased social comparison and differential teacher treatment of high and low achievers in the classroom (Eccles, Midgley, & Adler, 1984). When this happens, these structures promote achievement status hierarchies, differen-

tiated competence beliefs between low and high achievers, and friendship selection patterns based primarily on similarities in academic abilities. Consequently, low-ability children come to feel increasingly less competent, worthy, or valued precisely because their relatively lower ability is made salient (Covington, 1984; S. J. Rosenholtz & Simpson, 1984). These low-ability children also come to be perceived by their peers as less desirable friends than their high-achieving classmates, which, in turn, can increase their social isolation.

The use of collaborative or cooperative groups is a popular alternative to either whole-group, ability-grouped, or individualized instruction at the elementary school level. Slavin (1990) concluded that cooperative learning techniques in which students work in small groups and receive rewards or recognition based on group performance lead to increases in student achievement, self-esteem, and social acceptance among students of different social statuses and racial/ethnic backgrounds. With proper instruction in the social skills necessary for group work, cooperative groups can provide numerous niches for students with different strengths to participate in the learning process, can increase the amount of social support and reinforcement available in the classroom for learning complex material, can increase contact among students of different abilities, and can foster a broader network of friendship patterns in the classroom and fewer instances of social isolation (Slavin, 1990).

From a developmental perspective, the use of whole-group and within-class ability-grouped instruction increases in frequency as children progress from elementary to middle and high school. Within-class ability grouping in reading is widespread even in the early grades; the use of between-class ability grouping in mathematics, English, and science classes increases dramatically as children move into and through secondary school (Eccles, 1993; Feldlaufer, Midgley, & Eccles, 1988; Rounds & Osaki, 1982). At the same time, the use of both individualized instruction and cooperative grouping declines. We discuss the implications of these grade-related trends later when we discuss the transition into junior high school.

Level 3A: Teacher Beliefs

The next level of school contextual processes are most closely associated with the teacher. We discuss three examples of processes at this level: teacher beliefs, instructional practices, and teacher-student relationships. Although these three contextual features are typically studied independently and by different sets of researchers, it is important to remember that they always operate interdependently in the classroom and, are, thus, likely to have interactive effects on children (e.g., Ames, 1992; Eccles & Midgley, 1989; Marshall & Weinstein, 1984; Midgley, 1993; S. J. Rosenholtz & Simpson, 1984).

Teacher's general beliefs about their role. Teacher's beliefs about the role of teacher have important implications for children's functioning because these beliefs influence the nature of the interactions between children and teachers. One important role-definition dichotomy is the distinction between the role of academic instructor (oriented toward teaching academic content and getting children to master academic material; fostering the "good student") versus the role of socializer (oriented toward addressing children's socioemotional and behavioral needs and problems; fostering the "good citizen"). In a study of 98 elementary school teachers, Brophy (1985) found that teachers who saw themselves primarily as instructors responded much more negatively to those students who were underachievers, academically unmotivated, or disruptive during learning activities than to the other students in the class; in contrast, socializers responded most negatively to either the hostile aggressive and defiant students or the children who thwarted the teachers' efforts to form close personal relationships.

A related dichotomy of teacher role beliefs has grown out of the work on gender differences in math course enrollment (Eccles, 1984). Some teachers think of themselves as responsible for weeding out those students who are less capable; other teachers think of themselves as cultivators of all students. The first type of teacher is often labeled a weeder; the second a cultivator. This distinction is linked to a variety of other beliefs and practices such as: (a) theories of intelligence as either an entity that cannot be increased with practice versus an incremental characteristic that can be increased with practice (Dweck & Elliott, 1983), (b) mastery versus performance goals, and (c) competitive versus collaborative teaching/motivational strategies. Weeders endorse the entity view of intelligence, tend to hold performance goals for their students, and are more likely to use competitive motivational strategies. We see here a culturally rooted set of beliefs about the nature of intelligence and the role of teachers in providing for the future needs of their society. Such beliefs influence teacher practices in ways that either facilitate all children's performance or increase the disparity across students in performance and motivation.

General sense of efficacy. Teachers' general expectations for their students' performance (i.e., their sense of teaching efficacy) is another important belief. When teachers hold high generalized expectations for student achievement and students perceive these expectations, students achieve more, experience a greater sense of esteem and competence as learners, and resist involvement in problem behaviors during both childhood and adolescence (Eccles, 1983a; 1993; Rutter, 1983; Roeser, Eccles, & Sameroff, 1998; Weinstein, 1989). Such expectations, when communicated to the child, become internalized in positive self-appraisals that enhance feelings of worth and achievement. Similarly, teachers who feel they are able to reach even the most difficult students, who believe in their ability to affect students' lives, and who believe that teachers are an important factor in determining developmental outcomes above and beyond other social influences tend to communicate positive expectations and beliefs to their students. Thus, a high sense of teacher efficacy can enhance children's own beliefs about their ability to master academic material, thereby promoting effort investment and achievement (Ashton, 1985; Midgley, Feldlaufer, & Eccles, 1989b). On the other hand, low feelings of teacher efficacy can lead to behaviors likely to reinforce feelings of incompetence in the child, potentiating both learned helpless responses to failure in the classroom and the development of depressive symptoms (see Cole, 1991; Roeser et al., in press).

Differential teacher expectations. Equally important are the differential expectations teachers often hold for various individuals within the same classroom and the differential treatment practices that sometimes accompany these expectations. Weinstein (1989) and colleagues found that both high and low achievers perceive differential teacher treatment of students on the basis of ability in most elementary school classrooms. High achievers are seen by students of all ability levels as receiving higher expectations, more opportunities to participate in class, and more choice about work, whereas low achievers are seen as receiving more negative feedback, more control, and more feedback on completing work and following rules. The greater the perceived differential treatment in a classroom, the greater the impact of teacher expectations on achievement and children's self-perceptions of competence (Weinstein, 1989). Observational studies of teacher behavior provide validation for these perceptions: Teachers do treat high and low achievers differently in these ways (Brophy, 1988).

Most of the studies actually linking differential teacher expectations to either their own behaviors or to their students' achievement and motivation have been done under

the rubric of teacher expectancy effects. Beginning with the work by Rosenthal and Jacobson (see Rosenthal, 1969) and Rist (1970), many researchers have examined teacher expectancy effects. Their work suggests that teacher-expectancy effects depend on whether teachers structure activities for and interact differently with high and low expectancy students and on whether the students perceive these differences (Brophy, 1985; Eccles & Wigfield, 1985; J. S. Parsons, Kaczala, & Meece, 1982; Weinstein, 1989; Weinstein, Marshall, Sharp, & Botkin, 1987).

A great deal of the work on teacher expectancy effects has focused on differential treatment related to gender, race/ethnic group, and social class. Most of this work has investigated the potential undermining effects of low teacher expectations on girls (for math and science), on minority children (for all subject areas), and on children from lower social class family backgrounds (again for all subject areas; see Brophy & Good, 1974; Eccles & Wigfield, 1985; Jussim, Eccles, & Madon, 1996). More recently, researchers such as Steele (1992) linked this form of differential treatment, particularly for African-American students, to school disengagement and disidentification (the separation of one's self-esteem from all forms of school-related feedback). Steele argued that African-American students become aware of the fact that teachers and other adults have negative stereotypes of African-American children's academic abilities. This awareness increases their anxieties, which, in turn, lead them to disidentify with the school context to protect their self-esteem.

Recent work, however, suggests that teacher expectancy effects may not be as negative as once believed. For the effect to be of great concern, one needs to demonstrate that it has a negative biasing effect (i.e., that teachers' expectations lead to changes in motivation and performance over time beyond what would be expected given knowledge of the characteristics of the specific students; Jussim & Eccles, 1992; Jussim et al., 1996). Evidence for such negative biasing effects is minimal. Much of the association between teacher expectations for individual students and subsequent student motivation and performance reflects the accurate association between teacher expectations and student characteristics like prior achievement levels and behavioral patterns (see Jussim et al., 1996). In addition, not all teachers respond to their expectations with behaviors that undermine the motivation and performance of the low-expectancy students. Some teachers respond to low expectations with increased instructional and motivational efforts for particular students and succeed in increasing their motivation and their learning (Goldenberg, 1992). Nonetheless, small but consistent teacher expectancy effects can have a large cumulative effect on motivation and achievement (Jussim et al., 1996), particularly if these effects begin in kindergarten and the first grade (Entwisle & Alexander, 1993). Finally, Jussim et al. (1996) found that girls, low SES students, and minority students are more susceptible to these effects than White middle-class boys.

Weiner (1990) and Graham (1991) studied a slightly different aspect of within-classroom variations in the teacher-student interaction linked to teacher expectancy effects. Weiner (1990) hypothesized that teachers' emotional reactions convey their expectations to students—that is, teachers are likely to display pity in providing negative feedback to those students for whom they have low expectations. In contrast, they are likely to display anger in providing negative feedback to those students for whom they have high expectations. Such a difference in affect could underlie teacher expectancy effects. Graham (1991) investigated this hypothesis by manipulating bogus instructors' emotional reactions to experimental participants' (learners') performance on a laboratory task: Instructors who showed pity and offered excessive help, for example, produced learners who either attributed their failures to lack of ability and lowered their expectations for success (Graham & Barker, 1990), or engaged in a variety of behaviors (e.g.,

making excuses for their poor performance) designed to maintain their sense of self-worth (Covington, 1992). Similarly, J. S. Parsons et al. (1982) demonstrated that when praise is used in a way that conveys low teacher expectations (i.e., patronizing praise for low-level successes), it undermines junior high school students' confidence in their abilities as well as their expectations for success. In contrast, when overt criticism conveys high teacher expectations (i.e., when the teacher uses public criticism only with high performing students in order to protect the low performing students' egos), high rates of criticism are associated with higher than predicted confidence in one's ability.

Finally, teachers' feedback to children in the classroom also influences the impressions children form of one another. For example, White and Kistner (1992) showed kindergarten, first, and second graders video vignettes in which a peer-rejected male child received several different types of teacher feedback. The children rated the child in each of these vignettes. They rated those children who received positive teacher feedback as having performed better and being a "better" individual than those children who received more negative teacher feedback. The children who received the most derogatory teacher feedback were rated very negatively in terms of their social skills, moral character, and social acceptability.

Teachers' beliefs regarding the nature of ability. Both developmental and educational psychologists have become interested in a set of beliefs regarding the nature of abilities. These researchers have found that some individuals conceive of intellectual abilities as stable and largely inherited potentials; others conceive of intellectual abilities as acquired skills. Dweck and Elliott (1983) referred to this distinction as an entity versus an incremental view of intelligence. Recently, educational psychologists have begun to investigate the implications of such beliefs for student and teacher behaviors. Ames (1992) and Maehr and Midgley (1996) hypothesized that these beliefs affect the goals teachers and students have for learning; these goals, in turn, affect both the teachers' instructional practices and the students' learning behaviors. These researchers focus on two particular achievement goals—performance versus mastery goals—and hypothesize that these two goals are linked to two different patterns of instruction: The first pattern, called an ability-goal orientation, emphasizes relative ability, social comparison, and competition. Grouping by ability, differential rewards for high achievers, public evaluative feedback, academic competitions, and other practices can promote the notion that academic success means outperforming others and proving one's superior ability (Ames, 1992). Unfortunately, most youth, by definition, are not the best and thus may not receive rewards and recognition in classrooms that emphasize relative ability. We know that in ability-oriented classrooms, children are more likely to use low-level strategies to learn, experience more anxiety and negative affect, and devote attentional resources to making themselves look smarter or avoiding looking dumber than other students rather than learning the material (Ames, 1992; Covington, 1992). Children who lack confidence in their academic competence are particularly vulnerable in such environments. Learned helplessness responses to academic failure, the avoidance of engaging in work, and negative emotional experience are more likely to beset low-ability students in ability-focused environments (Dweck & Elliott, 1983; Nicholls, 1984; Strobel & Roeser, 1998).¹

¹An excellent cultural example of this is found on bumper stickers. Parents of high-achieving students sometimes receive bumper stickers indicating their child is on the honor roll at a particular school. Other parents, presumably with lower achieving children, sometimes have been known to put a bumper sticker on their car that says, "My child beat up your honor student" at such and such a school. Apparently, an ego-oriented school environment can cause feelings of anger and frustration not only in students, but also in the parents of these students.

In contrast, teachers who hold an incremental view of intelligence tend to adopt a task-goal orientation in their instructional practices. Such an orientation stresses self-improvement and effort as the major hallmarks of academic success. These teachers acknowledge individual effort and improvement regardless of a child's current ability level, provide choice and collaborative work, and emphasize to their students that mastering new content, learning from mistakes, and continuing to try are all highly valued hallmarks of success. Such practices reduce children's concerns about their ability relative to peers and the feelings of self-consciousness, anxiety, or disenfranchisement that often accompany such concerns (Ames, 1990). In these mastery-focused environments, children use deeper processing strategies to learn, report more positive and less negative affective states, and seem less concerned with their current ability and more concerned with task mastery, understanding, and self-improvement (Ames, 1992).

Developmental changes in teachers' beliefs. Grade-level changes have been documented for all of these types of teacher beliefs. For example, compared to teachers in elementary school settings, teachers in secondary school settings see their role more in relation to content instruction than to socialization (McPartland, 1990). This difference likely reflects two factors: First, secondary teachers' education is more focused on particular content areas than on child development. Second, aspects of teachers' work in secondary schools such as departmentalization by academic discipline and large student loads also promote a focus on academic content issues rather than individual mental health concerns.

Similarly, Roeser and Midgley (1997) found that with increasing grade level, middle school (sixth to eighth grades) teachers are less likely to endorse the notion that students' mental health concerns are part of the teacher role. We suspect that high school teachers feel even less responsible for addressing the socioemotional, in contrast to the intellectual, needs of their students. An important implication of this change is that, at a time when children need academic and socioemotional guidance and support from both parents and nonparental adults (i.e., during early adolescence), teachers may be less likely to provide such support given the number of students they teach, their educational training, and the size of secondary schools. Although elementary teachers seem sensitive to both internalized and externalized distress in children (Roeser & Midgley, 1997), secondary school teachers may fail to notice children who are experiencing internalized distress and having difficulty adjusting to the transition to middle or high school. This seems especially true of children who struggle emotionally but continue to perform at an acceptable academic level (Lord, Eccles, & McCarthy, 1994). Consequently, because secondary teachers have so many students, they may not be able to be sensitive to mental health issues until these problems severely undermine academic performance or disrupt classroom activities. This creates a hole in the safety net available to children at a time when they are in particularly acute need of adult support and guidance (Simmons & Blyth, 1987).

Grade-level differences have also been identified for teachers' endorsement of mastery versus ability goals. For example, Midgley et al. (Midgley, Anderman, & Hicks, 1995; Roeser, Midgley, & Maehr, 1994) found that as children progress from elementary to middle school, both teachers and students think that their school environment is increasingly focused on competition, relative ability, and social comparison. These changes occur during a time when adolescents are particularly vulnerable to social comparison with peers. They are beginning to differentiate ability from effort and also are starting to view ability more as a fixed capacity than on incremental skill (Nicholls, 1978; J. E. Parsons & Ruble, 1977). Not measuring up to one's peers in terms of academic ability

in school settings that increasingly emphasize ability differences is very likely to undermine many adolescents' self-esteem and academic motivation (see Eccles & Midgley, 1989; Maehr & Anderman, 1993).

Finally, research has shown grade-level differences in teachers' sense of their own efficacy (i.e., their ability to teach and influence all of the students in their classes). For example, Midgley, Feldlaufer, and Eccles (1988) found large differences in teachers' efficacy between elementary school and junior high school teachers: Teachers in junior high school environments feel less efficacious than their colleagues who teach in elementary school settings. These results are not surprising due to the larger number of students, the lack of extended contact with students during the day, and the content-focused educational training that secondary teachers experience in comparison to their elementary school colleagues. Nonetheless, this decline in teacher efficacy had a major impact on many of the children's development, particularly the low-performing children. Experiencing a decline in teachers' sense of efficacy as children move into secondary school undermines the quality of their school engagement. Early adolescents, in particular, need role models who provide supportive feedback about their ability to be successful academically. If teachers do not feel particularly efficacious in relation to their teaching, their students are also likely to lose confidence in their ability to learn.

Level 3B: Instructional Practices

Instructional practices and teacher discourse convey implicit and explicit messages concerning children's moral, social, and intellectual capacity, the goals and purposes of learning, and the different reasons for engaging in academic activities. Children's interpretation of these messages, in turn, influences the quality of their academic and socioemotional functioning (Deci & Ryan, 1985; Roeser, Midgley, & Urdan, 1996, in press). Motivational researchers have been particularly interested in practices related to classroom climate and classroom management.

Classroom climate and emotional support. Historically, most studies of teacher practice effects focused on the impact of their personal characteristics and teaching style on children's overall achievement, motivation, satisfaction, and self-concept (Dunkin & Biddle, 1974). This research assumed that general teacher characteristics (like warmth) and practices (like directness) would enhance student satisfaction, persistence, curiosity, and problem-solving capability through their impact on general classroom climate. Similarly, based on the assumption that a warm relationship with a teacher increases his or her influence because it increases children's desire to do what the teacher says (either due to identification or the increased power of teachers' social reinforcement properties), many investigators have studied the association between teacher warmth/supportiveness and student motivation and performance. This work assumed that high teacher emotional support would increase the value children attached to working hard in the classroom. However, because much of the early work had conceptual and methodological problems (Duncan & Biddle, 1974), the results are unclear.

More recent examinations of the effect of classroom climate have disentangled factors like teacher personality and warmth from teacher instruction and managerial style. This research has shown that effects of climate depend on its association with other aspects of the teachers' beliefs and practices. For instance, Moos et al. showed that student satisfaction, personal growth, and achievement are maximized only when teacher supportiveness is accompanied by efficient organization, stress on academics, and provision of focused

goal-oriented lessons (Fraser & Fisher, 1982; Moos, 1979; Trickett & Moos, 1974). Furthermore, these practices are more common among teachers who believe they can influence their students' performance and future achievement potential (Brookover et al., 1979; Rutter et al., 1979). Similarly, analogous to Baumrind's (1971) conclusions regarding the greater effectiveness of authoritative versus permissive parenting, teacher warmth and supportiveness should affect student effort and performance only if there are clear guidelines on what to do (i.e., if the teacher also runs a well-managed classroom).

Classroom management. Like work on family management, work related to classroom management has focused on two general issues: orderliness/predictability and control/autonomy. Interestingly, the findings from studies of teacher management parallel those from studies of family environment.

✓ *Orderliness/predictability.* In rooms where teachers have established smoothly running and efficient procedures for monitoring student progress, providing feedback, enforcing accountability for work completion, and organizing group activities, student achievement and conduct are enhanced. Although there has been almost no research on the impact of management on student beliefs and values, it seems likely that the quality of classroom management also contributes to differences in children's perceptions. For example, classroom academic orientation has significant, although small, benefits for children's perceptions of the importance of adherence to classroom work norms. Under conditions where children are held accountable for work, they exert more effort, value success more, and consequently do better. As a result, the children also see themselves as more able.

✓ *Control/autonomy.* Classroom practices related to the structure of authority are important for the development of children's regulation of their achievement behavior and for aspects of their emotional adjustment (Deci & Ryan, 1985). Researchers like Boggiano (Boggiano et al., 1992) and Deci and Ryan (Deci & Ryan, 1985) argued that intrinsic motivation is good for learning and that classroom environments that are overly controlling and do not provide an adequate amount of autonomy undermine intrinsic motivation, mastery orientation, ability self-concepts and expectations, and self-direction, and induce, instead, a learned helpless response to difficult tasks. Support for this hypothesis has been found in both laboratory and field-based studies (e.g., Boggiano et al., 1992; Deci, Schwartz, Sheinman, & Ryan, 1981; Flink, Boggiano, & Barrett, 1990; Grolnick & Ryan, 1987; Ryan & Grolnick, 1986): In classroom settings where children ✓ are given opportunities to make choices, pursue their interests, and contribute to classroom discussions and decisions, a sense of autonomous, self-determined behavior in relation to school work is inculcated. This sense of autonomy is related to children's intrinsic valuing of school, quality of cognitive and affective engagement with learning, performance, and feelings of esteem and personal control (Deci & Ryan, 1985).

In contrast, in classrooms where few provisions for self-determined behavior are granted and where external rewards, punishments, and praise are frequently used to induce achievement behavior, children are more likely to feel their behavior is being controlled by factors outside themselves. This feeling is associated with children's extrinsic motivation, external locus of control, and shallower engagement with learning activities (Deci & Ryan, 1985; Eccles et al., 1993; Pintrich & De Groot, 1990). In these environments, children are often working toward some goal extrinsic to learning; if so, they usually put forth the least possible effort to attain a reward, rather than approaching learning for its intrinsic qualities of knowledge building and enjoyment.

Highly controlling practices in the classroom with troubled children are especially problematic, leading to escalating behavior problems and plummeting motivation (P. Cooper & Upton, 1990). Teachers often respond to children who show poor achievement histories or underregulated behaviors such as inattention, impulsivity, and aggression with controlling methods (sanctions, public feedback) to get them to behave. Although some amount of structure and control is critical in bringing such students back to learning tasks, excessive use of extrinsic rewards and behavioral sanctions that require compliance undermine these children's intrinsic motivation (Skinner & Belmont, 1993) and lead to an escalation of negative behavior and feelings of defiance in emotionally troubled children (P. Cooper & Upton, 1990).

Finally, the authority structure in the classroom also has important effects on children's social relationships with each other. For example, in secondary classrooms, opportunities for students to participate in academic decisions are associated with less social isolation, a broader range of acquaintances, and less status-based friendship networks (e.g., Epstein, 1983).

Given these negative consequences of excessive control, it is interesting that adults in this culture have such a strong preference for controlling. For example, Boggiano and colleagues videotaped teachers teaching small groups of children a set of tasks using either a controlling strategy or a less controlling strategy (Flink et al., 1990). Observers of the tapes rated the more controlling teachers as better teachers despite the fact that the children had actually learned more under the less controlling teacher. Similar results have been reported by Deci and Ryan (1985). Although these researchers did not specifically investigate the origins of this bias, they suggested two possible reasons: (a) these styles appear more active, directive, and better organized, and (b) they are consistent with the types of teaching and parenting practices advocated by operant conditioning and token economy specialists (e.g., Kazden, 1982; see Boggiano, Main, & Katz, 1987).

Developmental changes in control strategies. Contrary to what one might expect to happen given the increasing developmental maturity of the children, secondary school teachers, compared to elementary teachers, use more control-oriented strategies, enforce stricter discipline, and provide fewer opportunities for student autonomy and decision making in the classroom (Midgley & Feldlaufer, 1987; Midgley, Feldlaufer, & Eccles, 1988; Willower & Lawrence, 1979). Apparently, as children move from elementary to junior high school environments, their teachers believe that they are less trustworthy and need to be controlled more. To explain this pattern, Willower and Lawrence (1979) suggested that as children grow older, bigger, and more mature, and as peer subcultures become stronger during adolescence, teachers see students as a threat to their authority and thus respond with more control and discipline. Stereotypes about adolescents as unruly and out of control are also likely to reinforce such beliefs and strategies. Finally, the demands of secondary school environments, in which teachers have to deal with many students, may predispose them to using more controlling strategies as a way of coping with so many students.

Practices that provide less support for autonomy are likely to be especially problematic at early adolescence when children express an increased desire for opportunities to make choices and have their voices expressed in the classroom (Eccles et al., 1993). This may be particularly true for students who, because they are poor or have a history of academic or behavioral problems, are placed in low-ability tracks and classrooms where controlling strategies are particularly prevalent (see Oakes, Gamoran, & Page, 1992). We discuss this later.

More integrated approaches to general practices and beliefs. The work reviewed thus far is based on studies focused on only one or two belief systems and/or contextual characteristics at a time. Recently, there has been a shift to a more global, integrated view of the impact of learning contexts on motivation.

General teaching practices linked to self-evaluation and motivation. Among the first such efforts, S. J. Rosenholtz and Simpson (1984) suggested a cluster of teaching practices (e.g., individualized versus whole-group instruction; ability grouping practices; and publicness of feedback) that should affect motivation because these practices make ability differences in classroom especially salient to students (see Mac Iver, 1988). They assumed that these practices affect the motivation of all students by increasing the salience of extrinsic motivators and ego-focused learning goals, leading to greater incidence of social comparison behaviors, and increased perception of ability as an entity state rather than an incremental condition. All of these changes should reduce the quality of children's motivation and learning. The magnitude of the negative consequences of these shifts, however, should be greatest for low-performing children: As these children become more aware of their relative low standing, they are likely to adopt a variety of ego-protective strategies that, unfortunately, undermine learning and mastery (Covington, 1992; S. R. Rosenholtz & Rosenholtz, 1981).

Girls and math (girl-friendly classrooms). The work on understanding group differences in achievement and achievement choices is another example of an attempt to identify a broad set of classroom characteristics related to motivation. The work on girls and math is one example of this approach. There are sex differences in children's preference for different types of learning contexts that likely interact with a subject area to produce sex differences in interest in different subject areas (Casslerly, 1980; Eccles, 1989; Hoffmann & Haeussler, 1995). Girls appear to respond more positively to math and science instruction if it is taught in a cooperative or individualized manner rather than a competitive manner, if it is taught from an applied- or person-centered perspective rather than a theoretical abstract perspective, if it is taught using a hands-on approach rather than a book-learning approach, and if the teacher avoids sexism in its many subtle forms. The reason given for these effects is the fit between the teaching style, the instructional focus, and girls' values, goals, motivational orientations, and learning styles. The few relevant studies support this hypothesis (see Eccles, 1994; Eccles & Harold, 1992; Hoffmann & Haeussler, 1995). If such classroom practices are more prevalent in one subject area (e.g., physical science or math) than another (e.g., biological or social science), then one would expect gender differences in motivation to study these subject areas. In addition, however, math and physical science do not have to be taught in these ways; more girl-friendly instructional approaches can be used. And when they are, girls, as well as boys, are more likely to continue taking courses in these fields and to consider working in these fields when they become adults.

The girl-friendly classroom conclusion is a good example of person-environment fit. Many investigators have suggested that children will be maximally motivated to learn in situations that fit well with their interests, current skill level, and psychological needs, so that the material is challenging, interesting, and meaningful (e.g., Csikszentmihalyi & Rathunde, 1993; Eccles, Midgley et al., 1993; Krapp, Hidi, & Renninger, 1992). Variations on this theme include aptitude by treatment interactions and theories stressing cultural match or mismatch as one explanation for group differences in school achievement and activity choices (e.g., Fordham & Ogbu, 1986).

Level 3C: Teacher-Student Relationships

The last aspect of classroom life discussed in this section concerns the relationships that teachers and students share with one another. Research has demonstrated that quality teacher-student relationships provide the affective underpinnings of academic motivation and success (Moos, 1979). Teachers who are trusting, caring, and respectful of students provide the socioemotional support that children and adolescents need to approach, engage, and persist on academic learning tasks and to develop positive achievement-related self-perceptions and values (Goodenow, 1993; Midgley, Feldlaufer, & Eccles, 1989b). Correlational studies with adolescents also show that students' perceptions of caring teachers enhance their feelings of self-esteem, school belonging, and positive affect in school (Roeser & Eccles, 1998; Roeser et al., 1996).

In addition to enhancing motivation, several authors have noted that in a highly complex society, teachers represent one stable source of nonparental role models for adolescents. Teachers not only teach, but they can provide guidance and assistance when socioemotional or academic problems arise, and may be particularly important in promoting developmental competence when conditions in the family and neighborhood do not (Eccles, Lord, & Roeser, 1996; Simmons & Blyth, 1987).

Level 3: Summary

In summary, these studies of classroom-level influence suggest that development is optimized when students are provided with challenging tasks in a mastery-oriented environment that provides good emotional and cognitive support, meaningful material to learn and master, and sufficient support for their own autonomy and initiative. Similar characteristics emerged as the important relationship influences on the ontogeny of motivation, suggesting that one could use the same theoretical framework for studying contextual effects in both arenas. Connell and Wellborn (1991) suggested that humans have three basic needs: to feel competent, to feel socially attached, and to have autonomous control in one's life. Furthermore, they hypothesized that individuals develop best in contexts that provide opportunities for each of these needs to be met. Clearly, the types of classroom characteristics that emerge as important for both socioemotional and intellectual development would provide such opportunities.

Level 4: Academic Tracks/Curricular Differentiation

The next level of influence is that of academic tracks or curriculum differentiation policies. These terms refer to the regularities in the ways in which schools structure sets of learning experiences for different types of students (Oakes et al., 1992). The process of providing different educational experiences for students of different ability levels is a widespread yet very controversial practice in U.S. schools. Tracking takes different forms at different grade levels. It includes within-class ability grouping for different subject matters or between-class ability grouping in which different types of children are assigned to different teachers. Within-classroom ability grouping for reading and math is quite common in elementary school. In the middle and high school years, between-class tracking becomes both more widespread and more broadly linked to the sequencing of specific courses for students bound for different post secondary school trajectories (college prep, general, vocational). Differentiated curricular experiences for students of different ability levels structure experience and behavior in two major ways:

First, tracking determines the quality and kinds of opportunities to learn the child receives (Oakes et al., 1992), and second, it determines exposure to different peers and thus, to a certain degree, the nature of social relationships that youth form in school (Fuligni, Eccles, & Barber, 1995).

Despite years of research on the impact of tracking practices, few strong and definitive answers have emerged (see Fuligni et al., 1995; Gamoran & Mare, 1989; Kulik & Kulik, 1987; Slavin, 1990). The results vary depending on the outcome assessed, the group studied, the length of the study, the control groups used for comparison, and the specific nature of the context in which these practices are manifest. The situation is complicated by the fact that conflicting hypotheses about the likely direction and the magnitude of the effect emerge depending on the theoretical lens one uses to evaluate the practice. The best justification for these practices derives from a person-environment fit perspective. Children will be more motivated to learn if the material can be adapted to their current competence level. There is some evidence consistent with this perspective for children placed in high ability classrooms, high within-class ability groups, and college tracks (Dreeban & Barr, 1988; Fuligni et al., 1995; Gamoran & Mare, 1989; Kulik & Kulik, 1987; Pallas, Entwisle, Alexander, & Stluka, 1994).

✓ The results for children placed in low-ability and noncollege tracks do not confirm this hypothesis. By and large, when long-term effects are found for this group of children, they are negative primarily because these children are typically provided with inferior educational experience and support (Dreeban & Barr, 1988; Pallas et al., 1994). Low-track placements have been related to poor attitudes toward school, feelings of incompetence, and problem behaviors both within school (nonattendance, crime, misconduct) and in the broader community (drug use, arrests) as well as to educational attainments (Oakes et al., 1992). But whether or not academic tracks promote such outcomes or reflect preexisting differences remains a matter of considerable debate. It is also important to note that these negative effects result from the stereotypically biased implementation of ability-grouping programs. A different result might emerge for the low-competence students if the teachers implemented the program more in keeping with the goals inherent in the person-environment fit perspective—that is, by providing *high* quality instruction and motivational practices tailored to the current competence level of the students.

Social comparison theory leads to a different prediction regarding the effect of ability grouping and tracking on one aspect of development: ability self-concepts. People often compare their own performance with the performances of others to determine how well they are doing (Ruble, 1983). They typically conclude they are doing well, and that they have high ability, if they are doing better than those around them. In turn, this conclusion should bolster their confidence in their ability to master the material being taught. Ability grouping should narrow the range of possible social comparisons in such a way as to lead to declines in the ability self-perceptions of higher ability individuals and to increases in the ability self-perceptions of lower ability individuals. The few existing studies support this hypothesis. For example, Reuman, Mac Iver, Eccles, and Wigfield (1987) found that being placed in a low-ability math class in the seventh grade led to an increase in self-concept of math ability and a decrease in test anxiety; and conversely being placed in a high-ability math class led to a decrease in self-concept of math ability (see also Reuman, 1989, for evidence of greater within- than between-classroom ability grouping effects among sixth graders). Similarly, Marsh, Chessor, Craven, and Roche (1995) found that being placed in a gifted and talented program led to a decline in the students' academic self-concepts.

The impact of these changes on other aspects of development likely depends on a variety of individual and contextual factors. For example, in his original achievement motivation

theory, Atkinson (1957) provided strong evidence that the engagement of highly motivated individuals is maximized when the probability of success is .5. If the net result of the big-fish-little-pond effect is to bring both low and high performers closer to the .5 probability level, then ability grouping should have a positive impact on all of the students in both ability groups who are highly motivated and a negative impact on all of the individuals in both ability groups who have low motivation to succeed. Theories focused on the importance of challenging material in a supported environment suggest an increase in motivation for everyone provided that the quality of instruction leads to equally challenging material for all ability levels. Conversely, if the social comparison context also increases the salience of an entity view rather than an incremental view of ability, then the decline in ability self-concepts of the high-ability individuals might lead them to engage in more failure avoidant and ego-protective strategies.

Yet another way to think about the impact of ability grouping on development is in terms of its impact on peer groups: Between-classroom ability grouping and curricular differentiation promotes continuity of contact among children and adolescents with similar levels of achievement and engagement with school. For those doing poorly in school, such practices can structure and promote friendships among students who are similarly alienated from school and are more likely to engage in risky or delinquent behaviors (Dryfoos, 1990). The "collecting" of children with poor achievement or adjustment histories also places additional burdens on teachers who teach these classes (Oakes et al., 1992).

✓ Tracking and ability grouping can also lead to the concentration of children with similar behavioral vulnerabilities. For instance, Kellam, Rebok, Wilson, and Mayer (1994) found that rates of moderate to severely aggressive children ranged from 7%–8% to 63% among two different first-grade classrooms in the same elementary school. They found that these differing rates were a direct result of between-class ability grouping policies. As a result of this policy, children in these two classrooms were exposed to very different environments: one in which aggression was deviant (only 7%–8% of students are aggressive) and one in which it was pretty much the norm (63% aggressive students). It seems likely that aggressive behavior would not necessarily lead to peer rejection in the classroom with high rates of aggression. To the contrary, in such an environment, aggression might confer status and social rewards among peers and thus be reinforced. By placing children with similar vulnerabilities in the same environment, both the reinforcement of negative behavior and promotion of friendships among similarly troubled children are more likely.

✓ In summary, between-class ability grouping and curriculum differentiation provide examples of how school policy, teacher beliefs and instruction, and student characteristics can conspire to create maladaptive transactions that perpetuate poor achievement and behavior among low-ability children. Such a hypothetical sequence is depicted in Figure 12.2. The placement of many low-ability children in a low-track classroom may cause some teachers to feel overwhelmed and inefficacious. This might translate into poor instruction, low expectations, and use of controlling strategies on the part of such teachers. These factors, in turn, can fuel student disengagement (e.g., Kagan, 1990), which then feeds back into the teachers' beliefs and practices. Eventually, academic failure of certain low-ability children can result from these reciprocal processes.

Another important and controversial aspect of curriculum differentiation involves how students get placed in different classes and how difficult it is for students to move between class levels as their academic needs and competencies change once initial placements have been made. These issues are important both early in a child's school career (e.g., Entwistle & Alexander, 1993) and later in adolescence when course place-

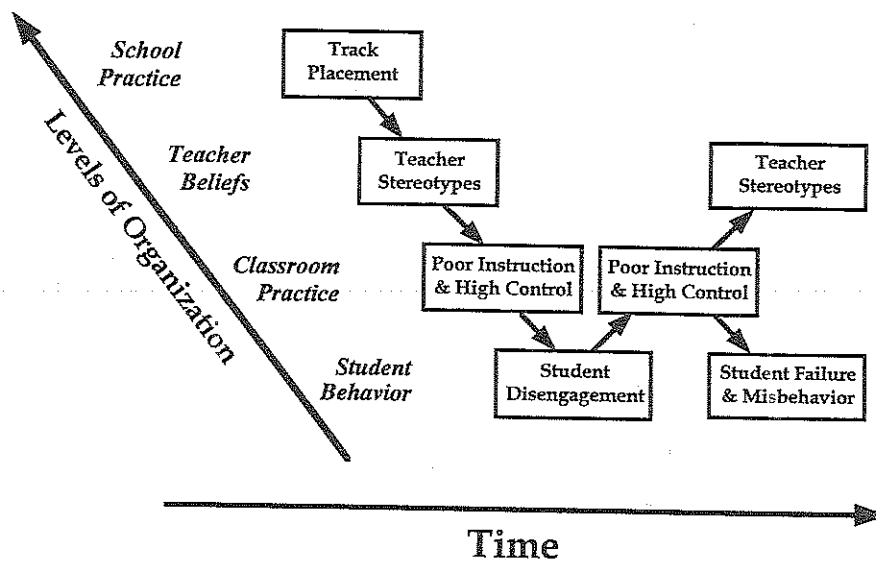


FIGURE 12.2. Illustration of multilevel transactional processes: Student placement, teacher beliefs and instruction, and student outcomes.

ment is linked directly to the kinds of educational options that are available to the student after high school. Dornbusch (1994) described the impact of tracking on a large, ethnically diverse sample of high school students in northern California. Analyzing the data course by course, Dornbusch found that 85% of his sample stayed in the same track during high school—there was little mobility. Furthermore, Dornbusch found that many average students were incorrectly assigned to lower track courses. This mistake had long-term consequences for these students, in effect putting them on the wrong path toward meeting the requirements for getting into California's higher educational system. Of particular concern was the fact that these youth and their parents, who were more likely to be of color and poor, were never informed of the potential consequences of course decisions made by school personnel during the child's early high school career. Thus, curricular differentiation and school-home communication practices exerted a profound influence over the life paths of these average students who, although able, were placed in lower ability classrooms in high school.

Level 5: Schools as Organizations

Schools also function as formal organizations. These aspects of the whole-school environment impact children's intellectual, socioemotional, and behavioral development. Important school organizational factors include student characteristics and fiscal resources (Lee et al., 1993), school climate and sense of community (Goodenow, 1993; Rutter, 1983), and such school-wide practices as start time (Carskadon, 1990, 1997).

Student characteristics and school resources. Certainly student composition issues such as the number of low-ability students or the percent of minority students can affect both the internal organization and the climate of the school, which, in turn, can impact the educational and behavioral outcomes of the students. These issues are described in detail elsewhere and are not pursued here (see Rutter et al., 1979). School

resources in terms of adequate materials, a safe environment, and continuity of teaching staff are also important for children's learning and well-being. Speece and Keogh (1996) provided a rather strong, succinct summary of these issues in stating,

Some of the risk and protective aspects of schools are so obvious that little discussion is needed and more research is irrelevant. It is a truism that safety is important, and that quality programs require adequate materials. Yet physical safety is a major problem in many areas, and a substantial number of children, especially children from low-income communities, attend schools that lack basic instructional materials (e.g., pencils, paper, textbooks), where buildings are deteriorated and dirty, and where play space is inadequate. These conditions must be considered factors that compound the developmental and educational status of at-risk children, particularly children who are at risk for learning problems. We suggest that improving the quality of schools in this domain is not a scientific question, but rather is a matter of social/political commitment. (p. 6)

General social climate. Recently, researchers have become interested in the social climate of the entire school. These researchers suggest, and provide some evidence, that schools, like communities, vary in the climate and general expectations regarding student potential (e.g., Bandura, 1994; Bryk, Lee, & Holland, 1993; Comer, 1980; Rutter et al., 1979). They suggest that general climate affects the development of both teachers and students in very fundamental ways. For example, in a preliminary evaluation of a school intervention based on these principles, Cauce, Comer, and Schwartz (1987) demonstrated a clear impact on children's confidence in their academic abilities. Similarly, in their analysis of higher achievement in Catholic schools, Bryk et al. (1993) discussed how the culture within Catholic schools is different fundamentally from the culture within most public schools in ways that positively affect the motivation of students, parents, and teachers. This culture (school climate) values academics, has high expectations that all children can learn, and affirms the belief that the business of school is learning. Similarly, Bandura and colleagues documented between-school differences in the general level of teachers' personal efficacy beliefs (Bandura, 1994) and argued that these differences translate into teaching practices that undermine the motivation of many students and teachers in the school. Mac Iver, Reuman, and Main (1995) discussed how many schools limit students' access to learning opportunities and evaluate them in ways that undermine their motivation and achievement.

School academic and social climate. Maehr and Midgley (1991) argued that just as classroom practices give rise to certain achievement goals, so too do schools as a whole through particular policies and practices. A school-level emphasis on different achievement goals creates a "school psychological environment" (Maehr, 1991) that affects students' academic beliefs, affect, and behavior (Roeser et al., 1996; Urdan & Roeser, 1993). For example, schools' use of public honor rolls and assemblies for the highest achieving students, class rankings on report cards, differential curricular offerings for students of various ability levels, and so on are all practices that emphasize relative ability, competition, and social comparison in the school (school ability orientation). On the other hand, through the recognition of academic effort and improvement, rewards for different competencies that extend to all students, and through practices that emphasize learning and task mastery (block scheduling, interdisciplinary curricular teams, cooperative learning), schools can promote a focus on discovery, effort and improvement, and academic mastery (school task orientation).

✓ The academic goal focus of a school has important implications for students' mental health. In a series of studies, we found that middle school adolescents' beliefs that their school is ability-focused was associated with declines in their educational values, achievement, and self-esteem, and increases in their anger, depressive symptoms, and school truancy from seventh to eighth grade. These effects were found after controlling for prior levels of each adjustment outcome, adolescents' prior academic ability, and their demographic background (race, gender, family income; Roeser & Eccles, 1998; Roeser et al., 1998). These results support the idea that schools that emphasize ability are likely to alienate a significant number of students who cannot perform at the highest levels leading to anxiety, anger, disenchantment, and self-selection out of the school environment (Eccles & Midgley, 1989; Finn, 1989). In contrast, schools that emphasize effort, improvement, task mastery, and the expectation that all students can learn appear to enfranchise more children in the learning process, promote adaptive attributions (e.g., achievement is based on effort and is therefore malleable), reduce depression, and decrease the frustration and anxiety that can be generated in achievement settings.

✓ An extension of this work on academic climates with high school students comes from a study by Figueira-McDonough (1986). She sampled two high schools that were similar in intake characteristics and achievement outcomes, but differed in their academic orientation and rates of delinquent behavior. The high school characterized by a greater emphasis on competition and high grades (ability-orientation) had higher delinquency rates and the students' grades were a major correlate of students' involvement in delinquent behavior (low grades predicted increased delinquent behavior). In contrast, in the school that was "more diverse in its goals and [took] a greater interest in students' non-academic needs," school attachment (valuing of school, liking teachers) was greater on average, and the individual difference in attachment was the primary negative correlate of delinquent activity. Figueira-McDonough (1986) concluded that the broader concern of this school with motivation and diverse needs of students enhanced the adolescents' attachment to school, which, in turn, discouraged involvement in delinquency.

Together, these studies clarify and extend Rutter's (1983) finding that increased academic emphasis leads to greater educational attainments and behavior among British secondary students in England. Although academic press in the form of homework, content coverage, and high teacher expectations is clearly important to enhancing children's learning and socioemotional development, the overall academic environment is important to ensuring the positive impact of such a press. High teacher expectations and a focus on self-improvement, effort, and collaboration can lead to greater educational and socioemotional adjustment in children, whereas a strong academic press linked with social comparison, relative ability, and competition is unlikely to have such a positive impact.

One final note on school-level academic goal emphases: They are strongly correlated with adolescents' perceptions of the school social climate. Adolescents who perceive a task orientation in their school also report that their teachers are friendly, caring, and respectful. These factors, in turn, predict an increased sense of belonging in school among adolescents (see also Goodenow, 1993). In contrast, perceptions of a school ability orientation are negatively correlated with adolescents' perceptions of caring teachers (Roeser et al., 1996). From the adolescents' perspective, a deemphasis on comparison and competition and an emphasis on effort and improvement are intertwined with their view of caring teachers.

School start and end time. School start time is yet another example of how regulatory processes associated with schools can interact with individual regulatory processes, here biological ones, to influence development. Research conducted by Carskadon (1990,

1997) showed that as children progress through puberty they actually need more, not less, sleep. During this same period, as children move through elementary to middle and high school, schools typically begin earlier and earlier in the morning, necessitating earlier rise times for adolescents (Carskadon, 1997). In concert with other changes, such as the later hours at which adolescents go to bed, the earlier school start times of the middle and high school create a developmental mismatch that can both promote daytime sleepiness and undermine adolescents' ability to make it to school on time, alert, and ready to learn.

The time which school ends also has implications for child and adolescent adjustment. In communities where few structured opportunities for after-school activities exist, especially impoverished communities, children are more likely to be involved in high-risk behaviors such as substance use, crime, violence, and sexual activity during the period between 2 p.m. and 8 p.m. Providing structured activities either at school or within-community organizations after school when many children have no adults at home to supervise them is an important consideration in preventing children and adolescents from engaging in high-risk behaviors (Carnegie Council, 1989).

Level 6: School/Home/Community Linkages

Home-school linkages. Parent involvement in their child's schooling has emerged consistently as an important factor in promoting both academic achievement and socioemotional well-being (Comer, 1980; Eccles & Harold, 1993; Epstein, 1992). Parent involvement in the form of monitoring academic activities and homework, providing assistance with homework, engaging children in educational enrichment activities outside of school, and active participation in classroom activities and in school organizations (e.g., governance, parent-teacher associations) all represent different forms of involvement (Epstein, 1992). Such parental involvement communicates positive educational expectations, interest, and support to the child. Parent involvement also helps to establish a safety net of concerned adults (parents and teachers) that can support children's academic and socioemotional development and assist children if adjustment problems should arise.

Evidence also suggests that home-school connections are relatively infrequent during the elementary years and become almost nonexistent during the middle and high school years (e.g., Carnegie Council, 1989; Eccles & Harold, 1993; Epstein, 1992; Stevenson & Stigler, 1992). This lack of involvement has been attributed to few efforts on the part of schools to involve parents, especially as children make the transition out of neighborhood-based elementary schools into the larger, more impersonal middle and high school environments (Eccles & Harold, 1993). The cultural beliefs that teachers are in charge of children's learning also contribute to the low levels of parent involvement in schools in the United States (Stevenson & Stigler, 1992). Other characteristics and experiences of parents that reduce involvement include a lack of time, energy, and/or economic resources, lack of knowledge, feelings of incompetence, failure to understand the role parents can play in education, or a long history of negative interactions of the parents with the schools also explain low levels of parent involvement in school (Eccles & Harold, 1993).

School-community linkages. Comer (1980) stressed the importance of school-community links: He argued that schools are a part of the larger community and that they will be successful only to the extent that they are well integrated into that community at all levels. For example, schools need to be well connected to the communities' social services so that schools can play a cooperative role in furthering children's and their

family's well-being. Conversely, communities need to be invested in their schools in ways that stimulate active engagement across these two societal units. For example, when the business community is well connected to the school, there are likely to be increased opportunities for students to develop both the skills and knowledge necessary to make a smooth transition from school into the world of work. Such opportunities can range from frequent field trips to various employment settings, to apprenticeships, to direct involvement of employees in the instructional program of the school.

Communities have other influences on youths' engagement at school. Part-time employment is another example of school-community linkage that relates to the quality of adolescents' adjustment. Although part-time work outside of school hours can promote developmental competence by providing structured, safe opportunities in which adolescents can acquire skills, learn to follow structured routines, work cooperatively with others, and serve others (Mortimer, Shanahan, & Ryu, 1994), some have suggested that too much employment can undermine school success and promote engagement in problem behaviors. For instance, Steinberg, Fegley, and Dornbusch (1993) found that adolescents who work 20 hours or more show poor grades, lower school commitment, and less engagement in class activities than their nonworking peers. One possible reason for these relations is that adolescents who work long hours are getting insufficient sleep. Steinberg et al. (1993) found that about one third of the adolescents in their study who worked 20 hours a week or more also reported they were frequently too tired to do their homework and often chose easier classes to accommodate their heavy work schedules. Although it is true that academically disengaged adolescents are more likely to seek out other settings such as part-time work to get their needs met, so too is it true that increased work hours predict academic disengagement (Steinberg et al., 1993). Finally, there may be other associated risks to working a lot (> 20 hours a week) in addition to going to school. According to Steinberg, the greater disposable income that working adolescents have may also predispose them to use drugs and alcohol more often than their nonworking peers.

Closer ties between schools and communities may be especially important in high-risk neighborhoods. Both researchers and policy makers have become concerned with the lack of structured opportunities for youth after school (e.g., Carnegie Corporation, 1992). In most communities, adolescents finish their school day by 2 or 3 in the afternoon. Also in most communities there are few structured activities available for these youth other than work. And typically, their parents are working until early evening—leaving the adolescents largely unsupervised. Such a situation is worrisome for two reasons: First, communities are missing an opportunity to foster positive development through meaningful activities, and second, adolescents are most likely to engage in problem behaviors during this unsupervised period. A closer collaboration between communities and schools could help solve this dilemma. At the most basic level, school buildings could be used as activity centers. At a more cooperative level, school and community personnel could work together to design a variety of programs to meet the multiple needs of their youth. We discuss this issue more extensively later in the chapter.

Summary of School Levels Analyses

In this section, we summarized the multiple ways through which schools as complex organizations can influence development. We stressed the fact that the various levels of organization interact in ways that shape the day-to-day experiences of children, adolescents, and teachers. We also stressed that there are systematic differences in these

organizational features and that these differences help explain differences in both teachers' behaviors and children's development within the school context.

In the next sections, we provide two more specific examples of how these processes interact with each other and with the developmental level of the child to influence human development. Both of these examples focus on school transitions: The first focuses on transition into elementary school and the second on the transition from elementary school to either middle or junior high school. Both of these examples illustrate how children are exposed to systematic age-related changes in their out-of-family contexts of development and how these changes can impact their development.

SCHOOL TRANSITIONS AS CRITICAL MEDIATORS OF SCHOOL CONTEXT EFFECTS

School transitions are an excellent example of how the multiple levels of school interact to affect development. All school districts must decide both when they allow children to begin school and how they will group the grade levels within the various school buildings. One common arrangement is to group children in grades kindergarten through sixth grade in elementary schools, children in grades 7 through 9 in junior high schools, and children in grades 10 through 12 in senior high schools. The other most common arrangement places the transitions after Grades 5 and 8—creating elementary schools, middle schools, and senior high schools. In both of these arrangements, children typically begin public schooling at age 5 with the entry into kindergarten. In addition, children typically move to a new and often larger building at each of the major school transition points (e.g., the move to middle or junior high school). These moves typically also involve increased busing and exposure to a diverse student body. Despite sound theoretical reasons to expect that such transitions should influence children's development (see Eccles, Midgley, & Adler, 1984; Higgins & Parsons, 1983), until recently there has been little empirical work on these effects. We discuss two of these transitions: the transition into elementary school and the transition from elementary to middle school. Because most of the empirical work has focused on the junior high/middle school transition, we emphasize this transition.

Transition Into Elementary School

Entrance into elementary school and then the transition from kindergarten to first grade introduces several systematic changes in children's social worlds. First, classes are age stratified, making age-independent ability social comparison much easier. Second, formal evaluations of competence by experts begins. Third, formal ability grouping begins usually with reading group assignment. Fourth, peers have the opportunity to play a much more constant and salient role in children's lives. Each of these changes should affect children's development. We know that first-grade children modify both their expectations and their behavior more to failure feedback than children in preschool and kindergarten (J. E. Parsons, 1982; J. E. Parsons & Ruble, 1972, 1977; Stipek & Hoffman, 1980). Changes such as those described could certainly contribute to this effect. We also know that parents' expectations for, and perceptions of, their children's academic competence are influenced by report card marks and standardized test scores given out during the early elementary school years, particularly for mathematics (Alexander & Entwisle, 1988; Arbreton & Eccles, 1994). But systematic studies of the effects of

transition into elementary school, and transitions from kindergarten to first grade, have yet to be done.

There is evidence emerging of significant long-term consequences of children's experiences in the first grade, particularly experiences associated with ability grouping and within-class differential teacher treatment. Studies have shown that teachers use a variety of information in assigning first-grade students to reading groups including temperamental characteristics (like interest and persistence), race, gender, and social class (e.g., Alexander, Entwisle & Dauber, 1994; Brophy & Good, 1974; H. M. Cooper, 1979; Rist, 1970). Alexander et al. (1994) demonstrated that differences in first-grade reading group placement and teacher-student interactions have a significant and substantial effect (even after controlling for beginning differences in competence) on motivation, achievement, and behavior many years later. Furthermore, Pallas et al. (1994) demonstrated that these effects are mediated, in part, by differential instruction and, in part, by the exaggerating impact of ability group placement on parents' and teachers' views of the children's abilities, talents, and motivation.

The Middle Grades School Transition

There is substantial evidence of declines in academic motivation and achievement across the early adolescence years (approximately ages 11-14; see Anderman & Maehr, 1994; Eccles et al., 1993; Eccles & Midgley, 1989; Wigfield, Eccles & Pintrich, 1996). This is also the time in which many young people move from elementary school into middle or junior high school. In many cases, the declines in motivation and achievement coincide with these school transitions. For example, there is a marked decline in some early adolescents' school grades as they move into junior high school (Simmons & Blyth, 1987). Similar declines occur for such motivational constructs as interest in school (Epstein & McPartland, 1976), intrinsic motivation (Harter, 1981), self-concepts/self-perceptions (Eccles & Midgley, 1989; Wigfield, Eccles, Mac Iver, Reuman, & Midgley, 1991), and confidence in one's intellectual abilities, especially following failure (Parsons & Ruble, 1977). There are also increases in test anxiety (Wigfield & Eccles, 1989), learned helpless responses to failure (Rholes, Blackwell, Jordan, & Walters, 1980), focus on self-evaluation rather than task mastery, and both truancy and school dropout (Rosenbaum, 1976). Although these changes are not extreme for most adolescents, there is sufficient evidence of declines in various indicators of academic motivation, behavior, and self-perception over the early adolescent years to make one wonder what is happening (see Eccles & Midgley, 1989). And although few studies have gathered information on ethnic or social class differences in these declines, we do know that academic failure and dropout is especially problematic among some ethnic groups and among youth from low SES communities and families. It is probable then that these groups are particularly likely to show these declines in academic motivation and self-perception as they move into and through the secondary school years.

Several explanations have been offered for these negative changes in academic motivation: Some point to the intrapsychic upheaval associated with early adolescent development (Blos, 1965). Others point to the simultaneous occurrence of several life changes. For example, Simmons and Blyth (1987) attributed these declines, particularly among girls, to the coincidence of the junior high school transition with pubertal development. Still others point to the nature of the junior high school environment itself rather than the transition. Extending person-environment fit theory (see Hunt, 1975) into a developmental perspective (stage-environment fit theory), Eccles and Midgley

(1989) proposed that these negative developmental changes result from the fact that traditional junior high schools do not provide developmentally appropriate educational environments for early adolescents. They suggested that different types of educational environments may be needed for different age groups to meet individual developmental needs and foster continued developmental growth. Exposure to the developmentally appropriate environment would facilitate both motivation and continued growth; in contrast, exposure to developmentally inappropriate environments, especially developmentally regressive environments, should create a particularly poor person-environment fit, which should lead to declines in motivation as well as detachment from the goals of the institution.

√ This analysis suggests several important developmental questions. First, what are the developmental needs of the early adolescent? Second, what kinds of educational environments are developmentally appropriate for meeting these needs and stimulating further development? Third, what are the most common school environmental changes before and after the transition to middle or junior high school? Fourth, and most important, are these changes compatible with the physiological, cognitive, and psychological changes early adolescents are experiencing? Or, is there a developmental mismatch between maturing early adolescents and the classroom environments they experience before and after the transition to middle or junior high school that results in a deterioration in academic socioemotional development and performance for some children?

Stage-environment fit and the transition to junior high or middle school. Remarkably few empirical studies have focused on differences in the classroom or school environment across grades or school levels. Most descriptions have focused on school level characteristics such as school size, degree of departmentalization, and extent of bureaucratization. For example, Simmons and Blyth (1987) pointed out that most junior high schools are substantially larger than elementary schools and instruction is more likely to be organized departmentally. As a result, junior high school teachers typically teach several different groups of students, making it very difficult for students to form a close relationship with any school-affiliated adult precisely at the point in development when there is a great need for guidance and support from nonfamilial adults. Such changes in student-teacher relationships are also likely to undermine the sense of community and trust between students and teachers, leading to a lowered sense of efficacy among the teachers, an increased reliance on authoritarian control practices by the teachers, and an increased sense of alienation among the students. Finally, such changes are likely to decrease the probability that any particular student's difficulties will be noticed early enough to get the student necessary help, thus increasing the likelihood that students on the edge will be allowed to slip onto negative motivational and performance trajectories leading to increased school failure and dropout.

In earlier sections, we presented examples of how such school-level characteristics might affect both teacher beliefs and practices, which, in turn, should affect children's development. But, until quite recently the relation of school transitions to these characteristics has rarely been considered.

First, despite the increasing maturity of students, junior high school classrooms, compared to elementary school classrooms, are characterized by a greater emphasis on teacher control and discipline, and fewer opportunities for student decision making, choice, and self-management (e.g., Brophy & Everston, 1978; Midgley & Feldlaufer, 1987; Moos, 1979). As outlined earlier, stage-environment fit theory suggests that the mismatch between young adolescents' desires for autonomy and control and their perceptions of the opportunities in their learning environments should result in a decline

in the adolescents' intrinsic motivation and interest in school. Mac Iver and Reuman (1988) provided some support for this prediction: They compared the changes in intrinsic interest in mathematics for adolescents reporting different patterns of change in their opportunities for participation in classroom decision-making items across the junior high school transition. Those adolescents who perceived their seventh-grade math classrooms as providing fewer opportunities for decision making that had been available in their sixth-grade math classrooms reported the largest declines in their intrinsic interest in math as they moved from the sixth grade into the seventh grade.

✓ *Affective relationships.* As noted earlier, junior high school classrooms are also characterized by a less personal and positive teacher-student relationship than elementary school classrooms. Given the association of classroom climate and student motivation reviewed earlier, it should not be surprising that moving into a less-supportive classroom leads to a decline in these early adolescents' interest in the subject matter being taught in that classroom, particularly among the low-achieving students (Midgley, Feldlaufer, & Eccles, 1988).

✓ *Teacher efficacy.* Junior high school teachers also feel less effective as teachers than elementary school teachers, especially for low-ability students (Midgley, Feldlaufer, & Eccles, 1988). Given the association of teacher efficacy and students' beliefs, attitudes, motivation, and achievement (Ashton, 1985; Brookover et al., 1979), it is not surprising that these differences in teachers' sense of efficacy before and after the transition to junior high school contributed to the decline in early adolescents', particularly low achieving adolescents', confidence in their academic abilities and potential (Midgley, Feldlaufer, & Eccles, 1989).

✓ *Organization of instruction.* The shift to junior high school is also associated with an increase in practices such as whole-class task organization, and between-classroom ability grouping (see Eccles & Midgley, 1989; Oakes, 1981; Rounds & Osaki, 1982). As noted earlier, such changes should increase social comparison, concerns about evaluation, and competitiveness (see Eccles, Midgley, & Adler, 1984; S. J. Rosenholtz & Simpson, 1984). They are also likely to increase teachers' use of normative grading criteria and more public forms of evaluation, both of which have been shown to have a negative affect on early adolescents' self-perceptions and motivation.

✓ *Grading practices.* There is no stronger predictor of students' self-confidence and efficacy than the grades they receive. If academic marks decline with the junior high school transition, then adolescents' self-perceptions and academic motivation should also decline. In fact, junior high school teachers use stricter and more social comparison-based standards than elementary school teachers to assess student competency and to evaluate student performance, leading to a drop in grades for many early adolescents as they make the junior high school transition (Eccles & Midgley, 1989; Finger & Silverman, 1966; Simmons & Blyth, 1987). Interestingly, this decline in grades is not matched by a decline in the adolescents' scores on standardized achievement tests, suggesting that the decline reflects a change in grading practices rather than a change in the rate of the students' learning (Kavrell & Petersen, 1984). Imagine what such declines in grades might do to early adolescents' self-confidence and motivation. Although Simmons and Blyth (1987) did not look at this specific question, they did document the impact of this grade drop on subsequent school performance and dropout. Even controlling for a youth's performance prior to the school transition, the magnitude of the

grade drop following the transition into either junior high school or middle school was a major predictor of early school leaving in both studies.

Motivational goals. Several of the changes just noted are linked together in goal theory. Classroom practices related to grading practices, support for autonomy, and instructional organization affect the relative salience of mastery versus performance goals that students adopt as they engage in the learning tasks at school. The types of changes associated with the middle grades school transition should precipitate greater focus on performance goals. As noted earlier, Midgley and colleagues found support for this prediction (Midgley, Anderman, & Hicks, 1995). In this study, both teachers and students indicated that performance-focused goals were more prevalent and task-focused goals were less prevalent in the middle school classrooms than in the elementary school classrooms. In addition, the elementary school teachers reported using task-focused instructional strategies more frequently than did the middle school teachers. Finally, at both grade levels the extent to which teachers were task-focused predicted the students' and the teachers' sense of personal efficacy. Not surprisingly, personal efficacy was lower among the middle school participants than among the elementary school participants.

Summary. Changes such as those just reviewed are likely to have a negative effect on many children's motivational orientation toward school at any grade level. But Eccles and Midgley (1989) argued that these types of school environmental changes are particularly harmful at early adolescence given what is known about psychological development during this stage of life. Evidence from a variety of sources suggests that early adolescent development is characterized by increases in desire for autonomy, peer orientation, self-focus and self-consciousness, salience of identity issues, concern over heterosexual relationships, and capacity for abstract cognitive activity (see Brown, 1990; Eccles & Midgley, 1989; Keating, 1990; Simmons & Blyth, 1987; Wigfield et al., 1996). Simmons and Blyth (1987) argued that adolescents need safe, intellectually challenging environments to adapt to these shifts. In light of these needs, the environmental changes often associated with transition to junior high school seem especially harmful in that they emphasize competition, social comparison, and ability self-assessment at a time of heightened self-focus; they decrease decision making and choice at a time when the desire for control is growing; they emphasize lower level cognitive strategies at a time when the ability to use higher level strategies is increasing; and they disrupt social networks at a time when adolescents are especially concerned with peer relationships and may be in special need of close adult relationships outside of the home. The nature of these environmental changes, coupled with the normal course of individual development, is likely to result in a developmental mismatch so that the fit between the early adolescent and the classroom environment is particularly poor, increasing the risk of negative motivational outcomes, especially for adolescents who are having difficulty succeeding academically in school.

Long-term sequel of the junior high school transition. In the previous section, we outlined the ways in which the junior high school transition can influence early adolescent development. In this section, we focus on a related question. What are the implications for later adjustment of individual differences in the transition to junior high school? Does poor adjustment to junior high school predispose a child to negative outcomes later in their psychological well-being and involvement in risky behaviors? Not all adolescents are adversely affected by the junior high school transition. Some find this shift

a positive challenge and respond with healthy developmental changes. Others find this shift quite difficult and experience negative developmental changes in response.

We used our longitudinal data to examine how individual differences in adjustment to junior high school are related to outcomes later in high school (for details see Eccles, Lord, Roeser, Barber, & Jozefowicz, 1997). First, we clustered the adolescents based on the change in their self-esteem from the end of the sixth grade to early in the seventh grade into three groups: Those whose self-esteem increased over this transition; those whose self-esteem declined; and those whose self-esteem remained the same. We then compared how these three groups fared through the end of high school.

Before summarizing these findings, it is important to note some of the other differences and nondifferences between these three groups during their early adolescence. First, these three groups did not differ in their sixth-grade self-esteem—that is, the decliners did not start out with lower self-esteem than the increasers. Second, the three groups did not differ in the academic achievement prior to the transition. Third, the three groups did differ in their sixth-grade reports of anxiety and self-consciousness with the decliners reporting significantly higher levels of both of these characteristics than either the increaser or the no change groups. Finally, girls were overrepresented in the decliners group. Girls and boys were equally represented in the no change and increaser groups. Thus, these groups differed in interesting ways prior to the transition.

They also differed in interesting ways at the end of their seventh-grade year. The decliners reported higher levels of depression and worry than the other two groups. The decliners also reported using drugs and alcohol more than the other two groups.

These differences persisted all the way through high school: At the end of their 12th-grade school year, the decliners still had significantly lower self-esteem than the other two groups. They also reported higher levels of depression and both drug and alcohol use. The boys were also more likely to have dropped out of high school. These results suggest that the junior high school transition can have long-term negative effects on a subset of adolescents who were already showing signs of psychological vulnerability in late elementary school.

Summary

This section summarized the evidence related to the impact of school transitions on development. As one would expect, given what we know about the ecological nature of the junior high school transition, many early adolescents, particularly the low achievers and the highly anxious, experience great difficulty with this transition. In many ways, this transition can be characterized as a developmentally regressive shift in one's school context. Consistent with our stage-environment fit perspective, such a shift has negative consequences for many youth's school engagement and performance. Also consistent with our stage-environment fit perspective, there are now an increasing number of intervention studies showing that the junior high school transition does not have to yield negative consequences for vulnerable youth. Middle grade educational institutions can be designed in a developmentally progressive manner. And when they are, the majority of early adolescents gain from this school transition.

We have now completed our discussion of school influences on development. In this section, we outlined the many ways in which schools do affect the socioemotional development of children and adolescents. We stressed the need to take both a systems level and a developmental perspective on the school. We now turn to a similar discussion of neighborhood influences. Like schools, neighborhoods are complex places in which

children and adolescents spend a great deal of time. Unlike schools, much of this time is unstructured and unorganized. In addition, neighborhoods are far less well-integrated contexts than schools. They include a wide array of people, contexts, and both opportunities and risks. Consequently, both the theoretical and empirical research on neighborhood effects is much more diverse and scattered. It is also more recent, and therefore, less voluminous. The major themes in this work are summarized in the next section.

NEIGHBORHOOD INFLUENCES

Recent interest in the potential impact of neighborhoods and communities on human development has grown out of two major lines of work: Bronfenbrenner's articulation of an ecological view of development and renewed concerns with the impact of poverty on children and adolescents. Each of these is discussed briefly.

In 1979, Bronfenbrenner published *The Ecology of Human Development*. In this book, he argued that human development takes place in a set of embedded contexts that extend outward from the individual. He labeled the first context beyond the self the *microsystem* and defined it as those interactions in which the child has direct contact with other human beings (e.g., parents, extended family members, peers, friends, and teachers). He defined *exosystems* as the set of larger institutions that influence children indirectly through their impact on the interactions that occur at the level of the microsystem. These institutions and contexts include schools, neighborhoods, parents' places of employment, and faith-based institutions. In between these two levels, he placed the *mesosystem* and defined it in terms of the relationships and contexts that connect the larger structures of the exosystem to the child through their impact on the microsystems. Finally, he defined the *macrosystem* as the more distal sociocultural and historical context that gives shape and meaning to the types of institutions created in the exosystem.

In this book, Bronfenbrenner argued that we needed to study the interplay of all of these contexts in order to understand the course of development over any person's life. In a series of very influential publications, he laid out a research agenda for applying this perspective to the study of human development. Several developmentalists from psychology and sociology have used these suggestions in studying neighborhood and community influences on development.

The publication of Wilson's book *The Truly Disadvantaged: The Inner City, The Underclass, and Public Policy* in 1987 was probably the biggest single impetus to the study of poverty in the last 50 years. He outlined the problems of inner-city neighborhoods with unusually high concentrations of poverty—arguing that such neighborhoods pose major threats for socializing the next generation. According to Wilson, inner-city poverty of the 1980s and 1990s is quite different than inner-city poverty in previous generations because employment opportunities have moved out of these neighborhoods—leaving behind a situation in which the adults cannot find employment within their neighborhoods and communities. This situation, in turn, leads to high rates of unemployment, demoralization, and drug use, along with the deterioration of both the two-parent family and community well-being. Together these characteristics create a situation in which children have few successful role models and little obvious incentive to do well in school. Instead, they have many models of hopelessness and illegal behaviors. They also live in run-down housing with abundant health risks. Parents who do not have the economic means to leave these neighborhoods must cope with these conditions as they try to raise their children to become hopeful, healthy, and fully

functioning members of the larger society. Wilson stressed just how difficult this task is if one lives in these truly disadvantaged neighborhoods.

Together, these two lines of work (i.e., Bronfenbrenner's theoretical publications and Wilson's study of inner-city neighborhoods), along with the growing interest in developmental psychology on the effects of poverty (e.g., McLoyd, 1990), stimulated research in both psychology and sociology on neighborhood effects. The results of this new work are just beginning to accumulate. We summarize the empirical work and the major theoretical approaches guiding this work next.

First and foremost, all researchers acknowledge the importance of studying both direct and indirect effects of neighborhood characteristics (see Brooks-Gunn et al., 1997a, 1997b; Elliott et al., in press). Building on Bronfenbrenner's suggestions, most attention has been focused on the indirect effects of neighborhood characteristics mediated through the family, school, and peer networks. For example, the stresses of living in poor, underresourced neighborhoods on parents are assumed to undermine effective parenting especially for vulnerable parents (e.g., those who are unemployed themselves or who have other major problems). In addition, the realities of the neighborhood are assumed to influence parents' goals and interactions with neighborhood institutions and residents (e.g., parents are likely to keep their children at home in the house or apartment as much as possible if the streets and parks in their community are dangerous). Similarly, because schools are funded to a great extent from neighborhood resources, the quality of the schools children attend is directly related to the incomes of the families living in their neighborhood. Finally, the kinds of peers children are likely to hang out with is directly influenced by the types of children and families who live in their neighborhood. An example of the nature of these indirect effects is illustrated in Figure 12.3. Work assessing these types of indirect influence is just beginning. Thus far, results support their importance (see Brooks-Gunn et al., 1997a, 1997b).

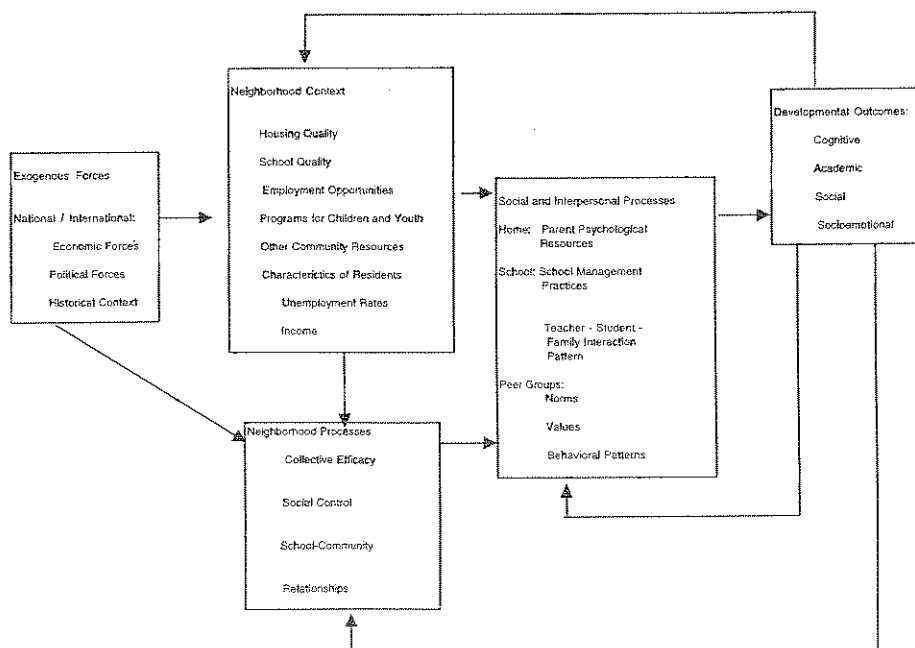


FIGURE 12.3. Direct and indirect neighborhood effects.

Second, the nature and range of neighborhood influences on development differ by age. Infants and preschoolers are affected most by the indirect effects of neighborhood characteristics on their parents' behaviors and by the direct effects of varying health hazards associated with living in different types of communities. As children get older, they are affected more directly by the other institutions in the neighborhood, such as the schools and community recreational facilities, and by the peers and adults who reside in their neighborhood. These out-of-home neighborhood influences are especially influential during adolescence and young adulthood (Brooks-Gunn et al., 1997a, 1997b).

Third, we are just beginning to study the influences of neighborhood culture on development. Most of the work to date has focused on establishing that there are neighborhood effects, that is, that children's development is affected by the characteristics of the neighborhoods in which they grow up independent of the characteristics of their families. This is not an easy thing to demonstrate because families living in different neighborhoods are also quite different from each other. The best example of this problem is family income. Poor families live in poor neighborhoods; rich families live in rich neighborhoods. How, then, does a researcher know if the relation of neighborhood poverty to children's school grades is due to neighborhood effects or to their parents' income? Researchers are still working out exactly how to answer this question.

The best example of an attempt to separate out these influences is the work by Rosenbaum and associates (e.g., Rosenbaum, 1991; Rosenbaum, Kulieke, & Rubi-nowitz, 1988). In 1976, the courts in Chicago ordered the Chicago Housing Authority to redress racial discrimination in housing placement by offering poor families the opportunity to move to better housing. Families who accepted this offer were assigned randomly to housing either in a better inner-city neighborhood or in a middle-class suburban community outside of Chicago. Rosenbaum and colleagues studied the long-term differences in developmental outcomes for the children in these two types of families. Those youth raised in the suburbs were much more likely to graduate from high school, to complete a college track high school academic program, and to attend college than those youth raised in the alternative inner-city neighborhood. Given the experimental design of this study, it provides the strongest empirical support available that the neighborhood in which a child grows up has an impact on that child's developmental outcomes. The source of this effect, however, was not identifiable in this study. Researchers are now shifting their focus more to understanding the processes that might account for such a neighborhood effect.

What might such processes be? Jencks and Mayer (1990) outlined three sets of processes of particular importance to this chapter: contagion, collective socialization, and resource exposure. By *contagion*, Jencks and Mayer (1990) were referring to the impact primarily of peer groups and young adults on children's behaviors, goals, and values. They argued that both good and bad behaviors are easily modeled and picked up by younger children as they watch the older children, adolescents, and young adults in their neighborhood. If most of the adolescents in a neighborhood drop out of school and use drugs and alcohol, then younger children are likely to adopt similar behavior patterns and values as they grow up. In addition, the older individuals in the neighborhood often actively recruit younger children and adolescents into the most typical activity settings (e.g., either gangs or more positive settings linked to faith-based or prosocial activity-based organizations like Girl Scouts)—further increasing the likelihood of children adopting the behavior patterns and values of the older residents in their communities. By and large, evidence supports this hypothesis (Brooks-Gunn et al., 1997a, 1997b).

By *collective socialization*, Jencks and Mayer (1990) were referring to the collaborative efforts in the community to socialize the next generation. Somewhat like the recruitment

component of the contagion effect, adults in a community sometimes have common goals for their children. If they are able to implement these goals with common strategies and socialization practices, they should be able to increase the likelihood of the children becoming the types of individuals they want them to become. Having abundant and consistent role models of the desired kinds of adult outcomes in the neighborhood should also increase this likelihood. Although work assessing this hypothesis is just beginning, initial findings provide promising support (Brooks-Gunn et al., 1997a, 1997b).

Closely related to this perspective is the recent work by Sampson, Raudenbush, and Earls (1997) on collective efficacy. These researchers defined *collective efficacy* in terms of two components: social cohesion (shared values and goals) and confidence in shared social control mechanisms. After controlling for family-level characteristics like income, education, and employment, and neighborhood-demographic characteristics like the percentage of families living below the poverty line, the percentage of immigrant and African-American families, and the instability of the resident structure, Sampson et al. found that neighborhoods with a high sense of collective efficacy among the residents had lower rates of crime and delinquency. These investigators are also gathering extensive developmental data on the children in these neighborhoods. In the future, we will learn whether living in a neighborhood with a high sense of collective efficacy also serves as a protective factor in children's development.

By *resource exposure*, Jencks and Mayer (1990) referred to the availability of opportunities versus dangers and risks. Communities vary in the presence and quality of such good things as schools, faith-based institutions and other types of activity-base organization, recreational facilities, health facilities, access to affordable stores and markets, and police monitoring, as well as such risky things as the presence of liquor stores and drug outlets, the proportion of run-down versus quality housing, and both gang and police harassment. Jencks and Mayer argued that exposure to these types of risks and opportunities should influence the behaviors of all members of the community. The little available evidence is supportive of these predictions but the effects are quite weak and, by and large, appear to be mediated through their impact on families and peer groups (see Brooks-Gunn et al., 1997a, 1997b).

Furstenberg and colleagues (Furstenberg, 1993; Furstenberg, Cook, Eccles, Elder, & Sameroff, in press) have suggested another mechanism of influence: *family management*. They suggested that the impact of neighborhoods on development would be moderated by the quality of parenting to which the children were exposed. Effective parents should adjust both their child-rearing practices and the nature of their children's exposure to opportunities and risks outside the home depending on the type of community in which they live. In turn, these practices should either buffer the children from exposure to potential risks or facilitate their growth through exposure to positive opportunities. They referred to this set of practices as family management. The little available evidence suggests that many well-functioning parents do vary their practices depending on their community and that successfully implementing locally effective strategies does buffer against the negative impact of neighborhood risks on development, particularly in the early and middle childhood periods (Brooks-Gunn et al., 1997a, 1997b; Duncan & Brooks-Gunn, 1997; Furstenberg et al., in press).

In summary, there has been a recent increase in the amount and quality of work being done on neighborhood effects. Although still in its infancy, this work has documented the influence of community characteristics on community members. As Bronfenbrenner (1979) predicted, communities influence the development of children primarily through their influence on the microsystem (i.e., through their influence on parenting practices, teacher behavior, school resources, and peer group behaviors). Because of the

importance of the microsystem, the magnitude of neighborhood effects is quite small. Effective parents are able to buffer their children's development from the risks and dangers in many neighborhoods. Nonetheless, the impact of the neighborhood on development increases as children get older (Elliott et al., in press), in part, because parental control and influences decrease as children move into adolescence and young adulthood. During these periods of life, the individual has much more control over their own behaviors and, consequently, their interactions with larger social units outside the home. This increasing independence can put them at greater risk to out-of-family influences on their development.

PEER CULTURE AS A PRIMARY MEDIATOR OF SCHOOL AND COMMUNITY EFFECTS

Throughout our discussion of school and community effects on development, we suggested ways in which particular characteristics might influence peer interactions. In this section, we discuss these connections in more detail. Unfortunately, there is very little empirical work directly related to this topic, particularly with regard to school effects. Most educational researchers have not included the role of peers at school as a key part of the impact of schools on human development. Instead, peer influences have been studied primarily by developmental psychologists and sociologists (see Rubin, Coplan, Nelson, Cheah, & Lagace-Seguin, chapter 11, this volume, for a summary of the typical research on peer relations). And with only a few outstanding exceptions, this work has not included the school as a primary context for understanding peer group processes. But, as discussed in earlier sections, both within-class and between-class school practices affect peer group interactions in and out of school, which, in turn, affect development. Consequently, we believe that this aspect of the school experience is critical. Although peer influences have been acknowledged more widely by researchers interested in community effects, this work has had a very narrow focus on the role peers play in crime, delinquency, and school failure (Brown, 1990). As discussed earlier, communities do provide the places in which a great deal of peer interaction takes place. Peer groups are often formed from amongst the residents in communities. This geographical clustering of peer networks can have either positive or negative effects on development depending on the nature of the individuals involved and the shared values and norms of the groups that emerge. Researchers are just beginning to explore the full range of such influences. In this section, we explore this issue. We focus on those aspects of peer relations not discussed in Rubin et al.'s chapter and those most closely linked with the school and community contexts. Specifically, we focus on the link between social competence and school motivation/achievement, on peers as colearners, on the reinforcing and socializing mechanism within peer groups, and on the coordination of multiple goals.

Social Competence and Motivation

There has been a long history of work focused on the relation between social competence and academic success. Much of this work has documented a positive association between these two domains of competence: Children who are accepted by their peers and who have good social skills do better in school and evidence more positive forms of academic achievement motivation; in contrast, socially rejected and highly aggressive children are at risk for numerous negative motivationally relevant outcomes (e.g., see Rubin et al.,

chapter 11, this volume; Asher & Coie, 1990; Hinshaw, 1992; Ladd & Price, 1987; Parker & Asher, 1987; Wentzel, 1991a, 1991b, 1993; Wentzel, Weinberger, Ford, & Feldman, 1990). Furthermore, social competence and social support can help ease school transitions (Ladd, 1990). The exact mechanisms underlying these associations are just beginning to be studied. Some have argued that the association represents the influence of some underlying form of inherited intelligence or temperamental/motivational orientation that facilitates the acquisition of both social and academic competence (e.g., Keogh, 1986; Martin, Drew, Gaddis, & Moseley, 1988). Others have extended this perspective by documenting that common socialized characteristics underlie competence in both domains—characteristics like a high sense of social responsibility (Wentzel, 1991a, 1991b), a moral commitment to conventional forms of success (Hart, Yates, Fegley, & Wilson, 1995), and good self-regulatory skills (Ford, 1982). A third hypothesized mechanism grows out of the social support and mental health literatures (Berndt, 1989). Children should be able to focus more of their attention on learning if they feel socially supported and well liked by both their peers and the adults in their learning context and if they feel that they belong (Goodenow, 1992; Ladd, 1990; Wehlage, Rutter, Smith, Lesko, & Fernandez, 1989). They may also place more value on learning in such a context.

Peers as Colearners

The extensive work on the advantages of cooperative learning provides another way of looking at the link between peers and schooling. This work has stressed several roles of peers as colearners. Most directly doing learning activities in a social context is usually more fun and, thus, intrinsically interesting (Slavin, 1990). Peers can also help each other understand and learn the material through group discussion, sharing of resources, modeling academic skills, and interpreting and clarifying the tasks for each other (Schunk, 1987; Sieber, 1979). Each of these characteristics should influence achievement through its impact on the children's expectations for success, their valuing of the activity, and their focus on learning rather than performance goals. One way positive social interaction has been facilitated in classrooms is through cooperative learning (see Slavin, 1990). Finally, cooperative learning is also linked to the mechanism just discussed: When cooperative learning is used in classrooms, children are more accepting of one another, and fewer children are socially isolated. Thus greater use of such techniques can mitigate the effects of peer rejection and lack of belonging on students' academic motivation.

Closely related to the work on cooperative learning is the work on peer tutoring. Children learn a great deal from teaching other children (Sieber, 1979). Such an arrangement benefits both the tutor and the tutee. An interesting variant on peer tutoring is described in *Turning Points* (Carnegie Council, 1989): cross-age tutoring. A particularly interesting intervention is described in this book: A very special group of eighth graders was trained and then allowed to tutor first graders in reading. What made the eighth graders special was the fact that all of them were doing quite poorly in school and were reading substantially below grade level. Nonetheless, they did read better than the first graders. It was hoped that the intervention would help both the eighth and first graders; and it did! Both the school engagement and performance of the group of eighth graders increased dramatically—so much so that they stayed in school and were reading at grade level when they graduated from high school. In addition, their tutees continued to read at grade level as long as they interacted with their older student tutor. This intervention demonstrates the power of cross-age tutoring as a way to provide older students with a meaningful and fulfilling task as well as younger children with the extra help they need to avoid falling behind.

Similar cross-age dynamics operate in communities. As noted earlier, older children and adolescents sometimes recruit younger children in the dominant peer group activity settings in particular neighborhoods; these can be either positive settings such as faith-based institutions or recreational centers or more negative settings such as gangs. Some of the most successful youth development programs discussed in *A Matter of Time* (Carnegie Corporation, 1992) involve cross-age mentoring programs like the one just described.

Peer Group Influences

Much of the classic work on peer influences on development focused on the negative effects of peer groups on adolescents' commitment to doing well in school. More recently, investigators have turned their attention to understanding the specific mechanisms by which peer groups can either support or undermine positive development through their impact on school engagement and involvement in other positive activities. This research has documented that children tend to cluster together in peer groups that share the same motivational orientations and activity preferences and that such clustering serves to reinforce their existing motivational orientation and activity preferences, leading to a strengthening of these individual differences over time (e.g., Ball, 1981; Berndt & Keefe, 1995; Berndt, Laychak, & Park, 1990; Epstein, 1983; Kindermann, McCollam, & Gibson, 1996; Youniss, 1980). But whether such effects are positive or negative depends on the nature of the peer groups' motivational values and behavioral orientations. For example, high-achieving children who seek out other high achievers as friends should end up with more positive academic motivation as a result of their interactions with like-motivated children. In contrast, low achievers who become involved with a group of friends who are also low achievers should become even less motivated to do school work and more interested in other activity settings (see Brown, 1990; Kindermann, 1993; Kinderman et al., 1996).

The role of peer group influences is likely to vary across different ages. For example, peers may play an especially important role during adolescence. There are two major differences between children and adolescents in peer group processes: (a) Adolescents are more aware of, and concerned about, peer group acceptance, and (b) adolescents spend much more unsupervised time with peer groups in social, sports, and other extracurricular activities (Brown, 1990). For example, early adolescents rate social activities as very important to them, and like them better than most of the other activities they do, particularly academic activities (Eccles & Midgley, 1989; Wigfield et al., 1991). Furthermore, Harter (1990) found that early adolescents' physical appearance and social acceptance are the most important predictors of their general self-esteem, much more important than their perceptions of their own cognitive competence. These results suggest that the potential role of peer groups should be greater during adolescence and that the nature of the effect should depend on the values of the peer group and the specific domains being considered. Hanging out with a group of friends highly motivated for school achievement should facilitate academic motivation and achievement, perhaps to the detriment of motivational commitment in other domains. Similarly, although hanging out with a low academic motivation group should undermine academic motivation, it may facilitate motivation and involvement in some other arena depending on the values of the peer group.

The work by Stattin and Magnusson (1990) provided a good example of this process. They reported that some young women (early maturers in particular) are particularly

likely to be channeled into early heterosocial peer groups and activities. Because these young women look sexually mature, they are more likely to become involved with older peers, particularly with older male peers who interact with them in a gender-role stereotypic manner. As these young women get caught up in this peer social system, they shift away their attention from academic activities and into heterosocial activities and roles. As a result, they lower their educational aspirations, shift the value they attach to academic pursuits, and, in fact, end up obtaining less education than one would have predicted based on their prepubertal academic performance and motivation. Instead, they often marry and become parents earlier than their other female classmates.

Somewhat related to the work by Magnusson and Stattin is the work on the institutional consequences of ability grouping. Earlier we discussed Pallas et al.'s (1994) study showing that ability grouping has an institutional (or social stratification) effect in the sense that it affects parents' and teachers' opinions of children's potential and motivation to a greater extent than predicted by the impact of ability grouping on the children's acquisition of school-based competencies. The impact of ability grouping on one's peer network is another example of an institutional effect. Several researchers (e.g., Dreeban & Barr, 1988; Eder & Felmelee, 1984) suggested that ability grouping influences motivation and achievement, in part, by its influence on one's peer group. The evidence of this effect is mixed for the elementary school years. But it is more likely to be true in the adolescent years when between-class ability grouping and curricular tracking becomes more common place. These institutional practices result in much greater segregation of peer groups based on the courses they are taking (Fuligni et al., 1995; Oakes, Gamoran, & Page, 1985; Rosenbaum, 1980; Vanfossen, Jones, & Spade, 1987). If this is true, then we would expect greater evidence of social stratification effects of ability grouping on development during the adolescent years.

Peers' Role in the Coordination of Multiple Goals

The work by Stattin and Magnusson is also illustrative of the importance of coordinating multiple goals. Just as schools and communities are complex organizations with multiple purposes and goals, so too individuals have multiple goals. Learning to coordinate and manage one's goals is a key developmental task. Peers can play a very central role in this process by making various goals and activities more or less salient and more or less desirable. Adolescence is an ideal time in which to observe the dynamics of this process. Similar processes have been suggested for various ethnic groups. Several investigators have suggested that some groups are likely to receive less peer support for academic achievement than affluent White youth (e.g., Fordham & Ogbu, 1986; Willis, 1977). Steinberg, Dornbusch, and Brown (1992) concluded that both the lower performance of African Americans and Hispanics and the higher performance of Whites and Asians are due more to ethnic differences in peer support for academic achievement than ethnic differences in either the value parents attach to education or the youths' beliefs regarding the likely occupational payoff for academic success. Although the adolescents in each of these group reported strong support for school achievement from their parents, the Hispanic and African-American students reported less support for school achievement among their peers than either the White or Asian-American students. Consequently there was less congruence between parents and peers in the valuing of school achievement. Some of the African Americans indicated that they have great difficulty finding a peer group that would encourage them to comply with their parents' valuing of educational success. As a result, they reported that they had to be very careful

in selecting which of their African-American peers to have as close friends. European- and Asian-American students were less likely to report this kind of peer dilemma.

Summary

Peer influences are an integral part of both school and neighborhood effects. Spending time with one's peers is a major activity in both of these extra-familial contexts. In fact, the opportunity to spend so much time with one's peers is one of the major distinguishing characteristics of these extra-familial contexts. In this section, we have stressed how the impact of peers in these settings depends on the nature of the individuals and the activities inherent in these peer contexts. Characteristics of schools and neighborhoods influence the types of peers to whom, and the types of peer group activities to which, children and adolescents will be exposed. If these individuals are positive, these associations are likely to facilitate positive developmental outcomes; if these individuals are problematic, these associations are likely to put the children's development at risk.

Schools and neighborhoods also structure the kinds of activities individuals get to engage in during their free time. We discuss the influences of these activities in the next section.

FREE-TIME ACTIVITIES AND DEVELOPMENT

The release of *A Matter of Time* by the Carnegie Corporation of New York (1992) put the spotlight on the role of productive use of time in successful development. It illustrated how much discretionary time children and adolescents have and how much of this time is spent on unstructured activities like hanging out with one's friends, watching television, and listening to music. The report stressed that constructive, organized activities are a good use of children's and adolescents' time because (a) doing good things with one's time takes time away from opportunities to get involved in risky activities; (b) one can learn good things (like specific competencies, prosocial values, and attitudes) while engaged in constructive activities; and (c) involvement in organized activity settings increases the possibility of establishing positive social supports and networks. To date, there has been relatively little longitudinal, developmentally oriented research focused on either the benefits or costs of how children and adolescents spend their discretionary time. Most of the relevant research has been done in sociology and leisure studies; and most of the work has focused on adolescents.

Most of the sociological and psychological research on activity involvement has focused on extracurricular school activities. This research has documented a link between adolescents' extracurricular activities and adult educational attainment, occupation, and income, after controlling for social class and ability (Eccles & Barber, in press; Landers & Landers, 1978; Otto & Alwin, 1977). This work also documented the protective value of extracurricular activity participation in reducing involvement in delinquent and other risky behaviors (e.g., Eccles & Barber, in press; Landers & Landers, 1978).

Research within leisure studies has taken a slightly different path—focusing on the differences between relaxed leisure and constructive, organized activities: Relaxed leisure is characterized as enjoyable, but not demanding (watching TV). In contrast, constructive, organized leisure activities (such as team sports, performing arts, and organized volunteer activities) both require effort and commitment and provide a forum in which to express one's identity or passion (Agnew & Petersen, 1989; Csikszentmihalyi & Kleiber, 1991; Larson & Kleiber, 1993). These activities are assumed to have more developmen-

tally beneficial outcomes than relaxed, unstructured leisure because they provide the opportunity (a) to acquire and practice specific social, physical, and intellectual skills that may be useful in a wide variety of settings; (b) to contribute to the well-being of one's community and develop a sense of agency as a member of one's community; (c) to belong to a socially recognized and valued group; (d) to establish supportive social networks of both peers and adults that can help one in both the present and the future; and (e) to experience and deal with challenges.

Recent research supports these assumptions about the positive effects of participation in organized activities (e.g., Simmons & Blyth, 1987). For example, Mahoney and Cairns (1997) and McNeal (1995) found that participation in extracurricular activities is related to lower rates of school dropout, particularly for high-risk youth. Mahoney also showed a connection to reduced rates of criminal offending (Mahoney, 1997). In addition, adolescents involved in a broad range of adult-endorsed activities report lower rates of substance use than their noninvolved peers (Youniss, Yates, & Su, 1997). Sports, in particular, has been linked to lower likelihood of school dropout and higher rates of college attendance (Deeter, 1990; Eccles & Barber, in press; McNeal, 1995), especially among low-achieving and blue-collar male athletes (Holland & Andre, 1987).

Participation in school-based extracurricular activities has also been linked to increases on such positive developmental outcomes as high school GPA, strong school engagement, and high educational aspirations (Eccles & Barber, in press; Lamborn, Brown, Mounts, & Steinberg 1993; Newman, Wehlage, & Lamborn, 1992). Similarly, participation in high school extracurricular activities and out-of-school volunteer activities predicts high levels of adult participation in the political process and other types of volunteer activities, continued sport engagement, and better physical and mental health (Glancy, Willits, & Farrell, 1986; Youniss, McLellan, & Yates, 1997; Youniss, Yates, & Su, 1997).

In contrast to these positive associations, sports has also been linked to increased rates of school deviance and drug and alcohol use (e.g., Eccles & Barber, in press; Lamborn, Brown, Mounts, & Steinberg, 1993). These results suggest that participation in organized activities can have both positive and negative effects. Why?

Several investigators have offered explanations for the positive results associated with participation: Rehberg (1969) suggested the importance of association with academically oriented peers, exposure to academic values, enhanced self-esteem, generalization of a high sense of personal efficacy, and superior career guidance and encouragement. Coleman (1961) stressed the values and norms associated with the different peer clusters engaged in various types of extracurricular activities. Otto and Alwin (1977) added skill and attitude acquisition (both interpersonal and personal) and increased membership in important social networks.

More recently, investigators have focused on the links between peer-group formation, identity formation, and activity involvement. For example, G. A. Fine (1992) explored the relation of participating in little league to both peer group and identity formation. He stressed how participation in something like little league shapes both the child's definition of himself as a jock and the child's most salient peer group. In turn, these characteristics (one's identity and one's peer group) influence subsequent activity choices—creating a synergistic system that marks out a clear pathway into a particular kind of adolescence. Similarly, Eckert (1989) explored the link between the peer group, identity formation and activity involvement. As one moves into and through adolescence, individuals become identified with particular groups of friends or crowds (see also Brown, 1990). Being a member of one of these crowds helps structure both what one does with one's time and the kinds of values and norms to which one is exposed. Over time, the coalescence of one's personal identity, one's peer group, and the kinds of

activities one participates in as a consequence of both one's identity and one's peer group can shape the nature of one's developmental pathway into adulthood.

This strong link between activity participation and peer group membership also provides an explanation for the negative influences of sports participation on drug and alcohol use. Knowing what an adolescent is doing often tells us a lot about who the adolescent is with: It is very likely that participation in organized activity settings directly affects adolescents' peer group precisely because such participation structures a substantial amount of peer-group interaction. One's coparticipants become one's peer crowd. And such peer crowds often develop an activity-based culture, providing adolescents with the opportunity to identify with a group having a shared sense of style. Involvement in a school organization or sports links an adolescent to a set of similar peers, provides shared experiences and goals, and can reinforce friendships between peers (see also Larson, 1994).

For the most part, such opportunities should have positive outcomes for development. However, if this peer group engages in such risky behaviors as drinking and using drugs, then it is likely that participation in the activity setting will lead to increases in these behaviors as well. Whether engagement in these types of risky behaviors has more serious negative consequences for development will depend on both the broader set of values endorsed by the peer group and the psychological characteristics and values of the individual.

CONCLUSION

In this chapter, we have summarized the many ways in which schools and communities can influence development. We began by pointing out how the multiple levels of school organization interact to shape the day-to-day experiences of children and teachers. We stressed how one must think of schools as complex organizations to understand how decisions and regulatory processes at each level impact on schools as a context for development. We also stressed the interface of schools as complex changing institutions with the developmental trajectories of individuals. To understand how schools influence development, one needs to understand change at both the individual and the institutional level. The stage-environment fit theory provides an excellent example of the linking of these two developmental trajectories. Imagine two trajectories: one at the school level and one at the individual level. Schools change in many ways over the grade levels. The nature of these changes can be developmentally appropriate or inappropriate in terms of the extent to which they foster continued development toward the transition into adulthood and maturity. (The changes can also be developmentally irrelevant but we do not discuss these types of changes.) Children move through this changing context as they move from grade to grade and from school to school. Similarly, children develop and change as they get older. They also have assumptions about their increasing maturity and the privileges it affords them. Optimal development occurs when these two trajectories of change are in synchrony with each other—that is, when the changes in the context mesh well with, and perhaps even slightly precede, the patterns of change occurring at the individual level. Furthermore, we summarized evidence that the risk of negative developmental outcomes is increased when these two trajectories are out of synchrony—particularly when the context changes in a developmental regressive pattern.

We also discussed the relation of school characteristics to other contexts of development, particularly the community and the peer group. We then discussed how neighborhood characteristics can influence development independent of its association with

schools. Finally, we summarized how both school and neighborhood influences are mediated by their impact on peer interactions and activity involvement. Throughout we stressed the need to look at the interaction between these various contextual influences. Too often researchers do not consider the interactions across contexts of development. Instead, they tend to specialize in one context—for example, the family or the peer group. But people live in multiple contexts. Making sense of, and coordinating the demands of, these multiple contexts are some of the more challenging developmental tasks. We know very little about how individuals manage these tasks and about how the ability to manage these tasks develops. We also know relatively little about how characteristics of one context influence the characteristics of other contexts. We summarized some of the ways in which school and neighborhood characteristics influence the nature of children's peer groups and peer interactions. Much more such work and theorizing is needed.

Another way to think about multiple contexts is in terms of their relative ability to meet human needs. As we noted earlier, Connell and Wellborn (1991) suggested that individuals develop best in contexts that provide opportunities to feel competent, to feel socially connected and valued, and to exercise control over one's own destiny. If this is true, then individuals should be drawn toward those contexts that provide these opportunities in a developmentally appropriate dose. Variations across contexts on these characteristics could explain why individuals come to prefer one context over another—for example, adolescents who are not doing well in school might turn to their group to find a sense of sense of competence and positive self-esteem.

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