The Development of Children Ages 6 to 14

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Abstract

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The years between 6 and 14—middle childhood and early adolescence—are a time of important developmental advances that establish children's sense of identity. During these years, children make strides toward adulthood by becoming competent, independent, self-aware, and involved in the world beyond their families. Biological and cognitive changes transform children's bodies and minds. Social relationships and roles change dramatically as children enter school, join programs, and become involved with peers and adults outside their families. During middle childhood, children develop a sense of self-esteem and individuality, comparing themselves with their peers. They come to expect they will succeed or fail at different tasks. They may develop an orientation toward achievement that will color their response to school and other challenges for many years. In early adolescence, the tumultuous physical and social changes that accompany puberty, the desire for autonomy and distance from the family, and the transition from elementary school to middle school or junior high can all cause problems for young people. When adolescents are in settings (in school, at home, or in community programs) that are not attuned to their needs and emerging independence, they can lose confidence in themselves and slip into negative behavior patterns such as truancy and school dropout. This article examines the developmental changes that characterize the years from 6 to 14, and it highlights ways in which the organization of programs, schools, and family life can better support positive outcomes for youths.

they typically think about the first two or three years of life. Although these years are marked by striking changes, the developmental and social changes that occur between ages 6 and 14 are dramatic, as well. Imagine a six-year-old girl starting first grade—maybe she has braids in her hair and is wearing a cute dress; she looks like a little girl and she is likely to be quite excited about going off to school. Her parents still exercise great control over her comings and goings; their biggest worries are likely to be about her safety when crossing streets and about her adjustment to elementary school. Now imagine that same girl as a 14-year-old starting the ninth grade: She now looks like a full-grown woman, leading her parents to worry about the negative influences of peers, premature sexual relationships, and the risk that she

may come to physical harm during the many hours that she is away from home.

Equally dramatic changes occur in the social contexts where youngsters spend time. A six-year-old boy is likely to be enrolled in a local neighborhood elementary school—perhaps within walking distance from home. By age 14, he will have changed schools at least once, moving into a junior high school or middle school. He may be looking forward to his classes, or he may have already psychologically turned his back on formal schooling. He may have sampled out-of-school activities from Scouts to basketball to handling a paper route. Because the experiences both boys and girls have in school and other activities will shape their development through this pivotal age period, efforts should be made to optimize these experiences, as recommended in the other articles included in this journal issue.

This article provides an overview of the kinds of biological, psychological, and social changes that characterize the years between 6 and 14. To facilitate the presentation, those years are divided into two broad periods: middle childhood (approximately ages 6 to 10) and early adolescence (approximately ages 11 to 14). Children's development during both periods is driven by basic psychological needs to achieve competence, autonomy, and relatedness. They seek opportunities to master and demonstrate new skills, to make independent decisions and control their own behavior, and to form good social relationships with peers and adults outside the family.¹

Each period is marked by basic biological and cognitive changes, as well as changes in the social surroundings where children's daily lives unfold. Exercising their growing autonomy in school and organized programs, children learn about the world outside the family, match themselves against the expectations of others, compare their performance with that of their peers, and develop customary ways of responding to challenges and learning opportunities. Through these years, they forge a personal identity, a self-concept, and an orientation toward achievement that will play a significant role in shaping their success in school, work, and life. Although researchers and policymakers have focused on the school as the critical arena in which development occurs and children's futures are sculpted, out-of-school programs offer alternative environments in which children can learn about themselves and their worlds, and can discover opportunities for carving their own versions of success.

Middle Childhood

The importance of middle childhood, as a developmental period, was not always recognized by scholars. The grand theorists Freud and Piaget saw middle childhood as a plateau in development, a time when children consolidated the gains they made during the rapid growth of the preschool period, and when they prepared for the dramatic changes of adolescence. Erik Erikson, however, who proposed the "eight stages of man" depicted in Table 1, stressed the importance of middle childhood as a time when children move from home into wider social contexts that strongly influence their development.² Erikson viewed the years between 7 and 11 as the time when children

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should develop what he called "sense of industry" and learn to cooperate with their peers and adults. The involvement in formal schooling and organized activities that begins during these years, introduces children to new social roles in which they earn social status by their competence and performance.³ Children who do not master the skills required in these new settings are likely to develop what Erikson called a "sense of inferiority," which can lead, in turn, to long-lasting intellectual, emotional, and interpersonal consequences.

Researchers have corroborated Erikson's notion that feelings of competence and personal esteem are of central importance for a child's well-being.45 For instance, children who do not see themselves as competent in academic, social, or other domains (such as athletics, music, drama, or scouting) during their elementary school years report depression and social isolation more often than their peers,6 as well as anger and aggression.7 Frequent feelings of frustration and incompetence early in a child's school career may coalesce into a negative pattern of adaptation toward schooling. Compared to children who feel competent, those who experience early learning difficulties in school are at increased risk for short-term

and long-term behavioral, academic, and psychiatric difficulties. They are likely to be retained in grade and to drop out before completing high school.8-12 Children's experiences of success or frustration when they participate in organized activities outside school can also play a crucial role in development, as they either exacerbate or compensate for children's experiences in school. Successful experiences in a wide range of settings can help to give a child a healthy, positive view of his or her competence, and a positive attitude toward learning and engagement in life's activities and challenges. Bearing in mind how important successful experiences can be to children of these ages may help the leaders and staff of out-of-school programs to maximize the benefits their programs provide.

Three key forces combine to influence children's self-confidence and engagement in tasks and activities during the middlechildhood years: (1) cognitive changes that heighten children's ability to reflect on their own successes and failures; (2) a broadening of children's worlds to encompass peers, adults, and activities outside the family; and (3) exposure to social comparison and competition in school classrooms and peer groups. Middle childhood gives children the opportunity to develop competencies and interests in a wide array of domains. For most children this is a positive period of growth: With the right kinds of experiences, they develop a healthy sense of industry and a confidence that they can master and control their worlds.

Development Changes in Middle Childhood

A crucial shift in children's cognitive skills occurs at around age six. Although the cognitive changes that occur during infancy and the preschool years are dramatic (as children learn their native language, for instance), almost all theories of development point to age six as the time when children begin to actually "reason" in the commonsense meaning of the word. All cultures that provide formal schooling for their children begin it between ages five and seven.13 Although the origin of the change is not well understood, there is a broad consensus that children develop key thinking or conceptual skills during this transition period, which are then refined

Table 1

Stages of Development According to Erik Erikson	
Approximate Age	Developmental Task or Conflict to Be Resolved
Birth to 1 year	Trust vs. mistrust: Babies learn either to trust or to mistrust that others will care for their basic needs, including nourishment, sucking, warmth, cleanliness, and physical contact.
1 to 3 years	Autonomy vs. shame and doubt: Children learn either to be self- sufficient in many activities, including toileting, feeding, walking, and talking, or to doubt their own abilities.
3 to 6 years	Initiative vs. guilt: Children want to undertake many adultlike activities, sometimes overstepping the limits set by parents and feeling guilty.
7 to 11 years	Industry vs. inferiority: Children busily learn to be competent and productive or feel inferior and unable to do anything well.
Adolescence	Identity vs. role confusion: Adolescents try to figure out, "Who am 1?" They establish sexual, ethnic, and career identities, or are confused about what future roles to play.
Young adulthood	Intimacy vs. isolation: Young adults seek companionship and love with another person or become isolated from others.
Adulthood	Generativity vs. stagnation: Middle-age adults are productive, performing meaningful work and raising a family, or become stagnant and inactive.
Maturity	Integrity vs. despair: Older adults try to make sense out of their lives, either seeing life as a meaningful whole or despairing at goals never reached and questions never answered.

Source: Berger, K.S. The developing person through the life span. New York: Worth Publishers, 1988, p. 37.

and consolidated throughout the middle-childhood years.

Middle childhood is marked by several types of advances in learning and understanding. During this period, in school and wherever they spend time, children acquire the fundamental skills considered to be important by their culture, such as reading and arithmetic. Skills of self-awareness also develop dramatically in middle childhood. For instance, children develop a notion of how one goes about learning, and they discover that strategies such as studying and practicing can improve learning and performance. They become more able to retrieve information and use it to solve new problems or cope with new situations. Both of these skills require the ability to reflect on what one is doing and what one wants to accomplish, and that ability increases dramiddle childhood. matically during Children begin to plan consciously, coordinate actions, evaluate their progress, and

modify their plans and strategies based on reflection and evaluation.

Finally, alongside their increasing ability to reflect on themselves, children also develop the ability to take the perspective of others. They come to understand that others have a different point of view and different knowledge than they have, and they come to understand that these differences have consequences for their interactions with other people. Through their growing understanding of other people's behavior and through their grasp of written materials, children take in information that builds their knowledge base and stretches their reasoning capacities. The basic mental capacity for all of these skills is in place at a very young age, but it is during middle childhood that these abilities become salient and conscious.14

Changes in Social Surroundings

The cognitive changes just described give children an expanded view of their social world and of themselves, providing the foundation for important social and emotional changes that also begin in these years. Along with their broadened exposure to adults and peers outside the family, children of these ages are typically given more freedom, more responsibilities, and more rights. This period is therefore marked by tensions between the new autonomy and the increasing expectations children encounter, which can either support or hamper the development of self-confidence.

Broadening Social Worlds

In the middle-childhood years, children spend less time under the supervision of their parents and come increasingly under the influence of teachers and activity leaders such as Sunday school teachers, coaches of Little League sports, instructors of dance or

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> ballet, music teachers, camp counselors, scout leaders, and directors of various classes at youth organizations such as the YMCA and YWCA. In contrast with the intimacy and familiarity that characterize family relationships, participation in school and formal programs exposes children to different religious and ethnic groups, as well as diverse personal styles. They see adults acting in various social roles, and they see different adults acting in the same role—as teacher or camp counselor, for example. These experiences give children a chance to compare adults with one another and to observe how authority figures judge the behaviors and personalities of their peers.

Increasingly, children spend time with their peers outside the orbit of parental control. Members of peer groups are responsible for managing their own relationships by controlling group dynamics, providing nurturance to each other, and sometimes establishing hierarchies within the group. As children get older, they also seek to contribute to their best friends' happiness, and they become sensitive to what matters to other people. 7,15 There is a

beginning of a "we" feeling that goes beyond cooperation; children begin to adjust to the needs of others in pursuit of mutual interests. At the same time, of course, children are concerned with winning acceptance from their peers, and they must manage conflicts between the behavior expected of them by adults and the social goals of the peer group. Entering formal organizations such as schools and after-school programs represents a shift for children: In the preschool years, their social roles were defined for them at birth (as a daughter or a brother). In middle childhood, their roles in school, programs, and friendship groups reflect their personal qualities and achievements.3

Schools and Formal Programs

The key social event that divides middle childhood from the preschool period is children's entry into elementary school, an event that coincides for many with participation in other formal organizations and programs outside of the family. As children enter school and join programs, they experience both increased individual freedom and heightened demands that they control their behavior. On the one hand, they are allowed to move about more freely, for instance, to ride bicycles to school and the YMCA, or take the bus alone to and from school or activities. On the other hand, parents, teachers, and other adults put increasing pressure on children to be "good," to show respect for adults, and to cooperate with their peers. 16 In school, in particular, children are expected to control themselves, cultivating good "work habits," sitting quietly for long periods of time, and complying with rules and expectations for personal conduct that are set by adults.

Schools and many after-school and summer programs tend to be age-segregated; that is, children of a certain age are grouped together. In such groups, the differences among the children in the group are fairly narrow, especially when contrasted with the differences among family members whose ages vary widely. The homogeneity of the school class or peer group focuses children's attention on individual strengths and liabilities, and on differences in personality or social skill. By heightening children's attention to social comparison, age-segregated programs and



classes can undermine children's self-confidence.

This effect is evident in school classrooms. The experiences children have in elementary and middle school, and in organized activities, tend to focus on skills (intellectual, athletic, artistic, etc.) and tend to make a child's success and failure relatively public. The performance of an elementary school student is systematically evaluated against preset standards of excellence, progress, and acceptable style; and children earn status in school depending on their performance. They also experience failure and frustration, especially if they are less skilled than their peers. Growing up in their families, children observe that older individuals are usually more competent and may conclude that they, too, will become more proficient over time. Afterschool programs that mix children of different ages can create a family-like environment that encourages children to master new skills and try activities even if success is unlikely at first. Competition and social comparison, in their many forms, are key threads of development during the middle-childhood period.

The Developing Self-Concept

School achievement and success in other arenas do not take place in a vacuum. The influence of psychological factors such as motivation, self-concept, and readiness to take on challenges has attracted the attention of researchers. Typically, children enter

the middle-childhood years very optimistic about their ability to master a wide array of tasks and activities, including their schoolwork.4 For example, when asked if they will be able to solve a complex puzzle, the vast majority of six-year-olds say yes, even after they just failed to solve a similar puzzle. 17,18 When asked how good they are at reading, math, musical instruments, and athletics, most first graders rank themselves near the top of the class, and there is essentially no relation between their own ability ratings and actual performance levels. 19,20 By age 10, however, children are typically far less optimistic, and there is a much stronger relation between their self-ratings and their actual performance. Their ability self-concepts and their expectations for success tend to decline over the elementary school years. For school subjects, this decline in self-confidence and motivation continues through adolescence, when it may lead students to avoid certain courses or to withdraw from school altogether.

A number of factors contribute to the drop in confidence during middle child-hood. In part, the optimistic comments of kindergarten and first-grade children reflect hoped-for outcomes rather than real expectations. Moreover, young children's skills improve quite rapidly, so for them it is not unrealistic to expect to shift from failure to success on any particular task. With time, children receive more failure feedback and they become more able to reflect on their performances and compare those with the

performances of other children. They learn that current failures are likely to be clues to future performances.

As some children pass through middle childhood, experiencing more frustration and becoming more pessimistic about their abilities, they may shy away from activities in which they are unlikely to succeed at first. This hesitancy to try new things depends, partly, on the meaning children attach to failure. Under usual circumstances in the American culture, children come to conclude that failure is an indication of their incompetence, not a condition that can be modified by learning or practicing.²¹ If they

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believe they lack innate ability (especially intellectual, athletic, or artistic ability), children understandably become discouraged and withdraw from the activity or task. By contrast, if children view abilities as subject to incremental improvement, it is plausible that they can become more competent with practice and development. When it is coupled with appropriate help from supportive adults, a belief that ability can be cultivated reduces children's frustration with failure and allows them to maintain high expectations for future success.

Expectations of success help to explain children's willingness to engage in tasks and to strive to succeed, but engagement is also influenced by children's interests and by the belief that a given task is important. Even if people are certain they can do a task, they may not want to engage in it. Both children's interests and their evaluation of specific tasks typically change during middle childhood.22 For instance, during the preschool years, children become more aware of their identity as male or female, and they often take up gender-stereotyped behaviors, attitudes, and interests.23 Studies have also shown that the value children assign to activities such as reading, music, math, or sports drops as they go through this period,4 and

their judgments of how useful and important these subjects are also decrease.²⁰ Especially valuable are school activities and courses that provide children with (1) the opportunity to learn without continual social comparison norms, (2) chances to control their own learning, (3) respect for all participants, and (4) strong emotional and social support.

Out-of-School Programs in Middle Childhood

Middle childhood is an exciting time of development. Typically, children begin this period with great optimism and enthusiasm for learning their place in their culture. It is often a time of enjoyable and productive relationships between children and adults, because children have acquired skills and knowledge that make them interesting companions to adults. In addition, in this culture adults may see this period as the calm before the storm of adolescence.24 Nonetheless, problems with anxiety, low self-esteem, and withdrawal in the face of challenges begin to emerge during this period as children respond to the new demands placed on them by the complex social institutions (school, programs, peer groups) to which they must adjust.25 These problems can affect the children's lives for a very long

Out-of-school programs can play a valuable role in buffering children against some of these problems. Such programs have more autonomy than the schools to design settings that support skill acquisition without emphasizing differences in children's abilities and talents. These programs can allow children to safely explore independence, peer relationships, and leadership. They can provide opportunities for children to form long-lasting relationships with adults outside their families. Programs with these characteristics will not only support healthy, positive development during middle childhood, they will also put in place the kind of safety net needed to support healthy, positive passage through early and middle adolescence.

Early Adolescence

Few developmental periods are characterized by so many changes at so many different levels as early adolescence, when children face the biological transformations of

puberty, the educational transition from elementary to secondary school, and the psychological shifts that accompany the emergence of sexuality. With rapid change comes a heightened potential for both positive and negative outcomes, creating important opportunities for families, schools, and out-of-school programs to interact with adolescents in a way that fosters growth and development.

Adolescence was once labeled a time of sturm und drang or storm and stress. It is now understood that most youngsters pass through this developmental period without undue stress, although many do experience difficulty. For example, between 15% and 30% of young people drop out of school before completing high school; adolescents have the highest arrest rate of any age group; and increasing numbers of adolescents consume alcohol and other drugs on a regular basis.26 Many of these behavioral problems begin during the early adolescent years,27 when psychological problems also increase.28 For example, depression and eating disorders increase in prevalence and seriousness, particularly among females, and the incidence of attempted and completed suicides rises. Some researchers believe that it is the combination of so many changes occurring simultaneously that makes early adolescence problematic for many young people.^{29,30} Coping with the stresses of pubertal change, school transitions, and the dynamics of dating at the same time puts young adolescents at risk for developmental problems such as lowered self-esteem and early sexual activity.

For some children, the early-adolescent years mark the beginning of a downward spiral leading to academic failure and school dropout. Some early adolescents see their school grades decline markedly when they enter junior high school, along with their interest in school, intrinsic motivation, and confidence in their intellectual abilities.30 Negative responses to school increase as well, as youngsters become more prone to test anxiety, learned helplessness, and self-consciousness that impedes concentration on learning tasks. Rates of both truancy and school dropout rise during these years.4 Although these changes are not extreme for most adolescents, there is sufficient evidence of gradual decline in various indica-

tors of academic motivation, behavior, and self-perception over the early-adolescent years to raise alarm.

The negative motivational and behavioral changes described above might result from the psychological upheaval assumed to be associated with early-adolescent development²⁴ or from the simultaneous occurrence of multiple life changes.³⁰ Another factor is the failure of some families and schools to provide flexible environments that respond to the adolescent's emerging maturity and

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independence. Theory suggests that the fit between the features of the social environment and an individual's characteristics can influence behavior, motivation, and mental health.³¹ Individuals are not likely to do very well, or to be very motivated, if they are in social environments that do not fit their psychological needs. The next section of this article summarizes the basic changes young adolescents are facing and examines how the family and the junior high school respond to those changes.

Developmental Changes in Early Adolescence

A central task of adolescence is to develop a sense of oneself as an autonomous individual. The drive for such autonomy derives from the internal, biological processes marking the transition to a more adult role (puberty and increasing cognitive maturity) and from the shifts in social roles and expectations that accompany these underlying physiological and cognitive changes. Compared to children under age 10, teenagers are given new opportunities to experience independence outside of the home. They spend much more unsupervised time with peers which (compared to adult-child relationships) are relatively equal in terms of interpersonal power and authority.^{3,29} At the same time, however, they continue to rely on the support and guidance offered by adults

in the family, in school, and in community-based programs or activities.

Puberty

The biological changes associated with the transition of early adolescence are marked. When the hormones controlling physical development are activated in early puberty, most children undergo a growth spurt, develop primary and secondary sex characteristics, become fertile, and experience increased sexual libido. Girls begin to experience these pubertal changes earlier than boys (by approximately 18 months), so girls and boys of the same chronological age are likely to be at quite different points in physical and social development between the ages

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of 10 and 14. In any sixth-grade classroom, there will be girls who are fully mature and dress like adult women, girls who still look and dress like children, and boys whose bodies have not even begun to change. It is easy to imagine how this variation in physical maturity complicates the social interactions in classrooms and organized coeducational programs.

The varied timing of pubertal development also creates different psychological dilemmas for early-maturing girls versus early-maturing boys. Early maturation tends to be advantageous for boys, enhancing their participation in sports and their social standing in school. It can be problematic, however, for girls. Early-maturing girls are the first individuals in their cohort to begin changing, and the resulting female physical changes (such as increasing body fat) do not fit the valued image of the slim, androgynous fashion model.30.32 In fact, early maturing white females have the lowest self-esteem and the most difficulty adjusting to school transitions, particularly the transition from elementary to junior high school.25 These difficulties can have long-term consequences. One study found that early-maturing girls were more likely than their later-maturing peers to date older males and then to drop out of school

and marry.³³ Despite the intensity and universality of changes associated with puberty, however, school activities and out-of-school programs seldom focus explicitly on helping adolescents adjust to their changing bodies and relationships without losing sight of their goals.

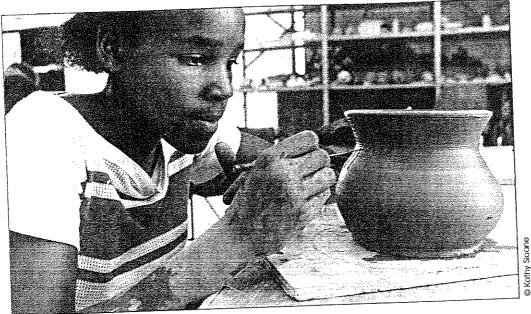
Changes in Cognition

The most important cognitive changes during early adolescence relate to the increasing ability of children to think abstractly, consider the hypothetical as well as the real, consider multiple dimensions of a problem at the same time, and reflect on themselves and on complicated problems. \$4,35 There is also a steady increase in the sophistication of children's information-processing and learning skills, their knowledge of different subjects, their ability to apply their knowledge to new learning situations, and their awareness of their own strengths and weaknesses as learners.36,37 These higher-order cognitive abilities help adolescents regulate their learning and behavior better to accomplish more complicated and elaborate tasks.

The same cognitive changes can also affect children's self-concepts, thoughts about their future, and understanding of others. During early adolescence, young people focus more on understanding the internal psychological characteristics of others, and they increasingly base their friendships on perceived compatibility in such personal characteristics.14 The middlechildhood and early-adolescent years are viewed by developmental psychologists as a time of change in the way children view themselves, as they consider what possibilities are available to them and try to come to a deeper understanding of themselves and others around them.5,38

Relationships with Peers and Family

There is little question that parent-child relations change during early adolescence, although the extent of actual disruption in those relationships is a subject of debate. ^{39,40} As adolescents become physically mature, they often seek more independence and autonomy, and they may question family rules and roles, leading to conflicts over issues such as dress and appearance, chores, and dating. Parents and adolescents also have fewer interactions and do fewer things



together outside the home than they did at an earlier period-as illustrated by the horror many adolescents express at seeing their parents at shopping malls. This "distancing" in the relations between adolescents and parents may be a natural, evolutionary part of puberty: There is evidence from nonhuman primates that puberty is the time at which parents and offspring go their separate ways. 41 Even without taking an evolutionary perspective, one can argue that distancing in parent-adolescent relations has a functional value for adolescents in that it fosters their independence, prompts them to try more things on their own, and develops their sense of efficacy. 42

Out-of-school programs can play a very important role in this distancing process. Evidence from a variety of sources suggests that although early adolescents want a certain amount of distance from their parents, they often want to fill this space with close relationships with other, nonfamilial adults.32 They want to share their ideas with adults and to benefit from adult wisdom. It is likely that adolescents turn disproportionately to their peers for guidance through the "separation" process only when they do not have opportunities to bond with nonfamilial adults. Out-of-school programs are ideal settings for such interactions and relationships to flourish.

Friendships and Peer Conformity

The most controversial change during early adolescence may be the young person's

increasing focus on peers. To the chagrin of parents and teachers, many adolescents give priority to social activities with peers, peer acceptance, and appearance rather than academic courses and other organized activities. ⁴³ Further, early adolescents' confidence in their physical appearance and social acceptance is often a more important predictor of their self-esteem than is confidence in their cognitive/academic competence.⁵

Children's conformity to their peers peaks during early adolescence, reflecting the importance of social acceptance to youngsters of this age. Much has been written about how peer conformity can create problems for early adolescents and about how "good" children often are corrupted by the negative influences of peers (particularly by gangs). However, although pressure from peers to engage in misconduct increases during early adolescence, the view that peer groups are mostly a bad influence during this period is overly simplistic.15 More often than not, early adolescents agree with their parents' views on important issues such as morality, educational goals, politics, and religion, while peers have more influence on things such as dress and clothing styles, music, and activity choice. In addition, adolescents usually seek out friends who are similar to them (fellow athletes or honor students). Thus, they are likely to choose friends whose views on important issues resemble those that are espoused at home. One expert concludes that it is poor parenting that usually leads children to get in with a "bad" peer group, rather than the peer group pulling a "good" child into difficulties. ¹⁵ The peer group acts more to reinforce existing strengths and weaknesses than to change adolescents' characteristics.

Family Support for Growing Autonomy

In thinking about how the family environment shapes early-adolescent development, it is useful to recall that the key task confronting the adolescent is to develop a sense of self as an autonomous individual. The accelerating effort by youths to control their own lives is accompanied by pressure on the family to renegotiate the power balance

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between parent and child.^{24,29,40,42,44} It is the fit between an early adolescent's family environment and his or her developmental needs that is critical to successful adaptation by both parents and early adolescents in this transitional period.²⁹

Achieving a good match requires that parents be able to adjust to their early adolescent's changing needs with relatively little conflict. Studies show that family environments offer opportunities for personal autonomy and encourage the early adolescent's role in family decision making are associated with positive outcomes, such as self-esteem, self-reliance, satisfaction with school and student-teacher relations, positive school adjustment, and advanced moral reasoning.25 Conversely, a parenting style that is coercive, authoritarian, and not attuned to the adolescent's need for autonomy and input is associated with self-consciousness and lowered self-esteem.45 Adaptations within the family may also influence how well the young person negotiates changes in other realms of life, such as changing peer relationships or the transition to junior high school.29

Contexts That Promote Development

The educational environments that preteens enter are often not very responsive to adolescent development. In some ways, the academic environments in typical junior high and middle schools are less well matched to the needs and capacities of youths than are elementary schools,²⁹ and the transition to junior high triggers negative changes for some youths, although not for all, ^{30,46,47}

For example, the structure of junior high schools reduces opportunities for adolescents to form close relationships with their teachers at precisely the point in the early adolescents' development when they have a great need for guidance and support from nonfamilial adults. Because most junior high schools are larger than elementary schools, and instruction is organized by department, teachers work with several groups of students each day and seldom teach a student for more than one year.³⁰ Interactions between teacher and student usually focus on the academic content of what is being taught or on disciplinary issues, and teachers at this level tend to feel less effective as teachers.31 These structural factors can undermine the sense of community and trust between early adolescents and their teachers—leading in turn to a greater reliance by teachers on authoritarian control and increased alienation among the students.

Classroom practices may also undermine early adolescents' school motivation. Junior high school teachers use a higher standard in judging their students' competence and in grading their performance than that used by elementary school teachers,³⁰ and declining grades strongly predict declines in the self-perceptions and academic motivation of early-adolescent students. When teachers and students are not close to one another, it is unlikely that any one student's difficulties will be noticed early, increasing the chance that students on the edge will slip onto negative trajectories leading to school failure and dropout.

The environmental changes that students experience as they move into middle-grade schools are particularly harmful in that they emphasize competition, social comparison, and self-assessment at a time when the adolescent's focus on himself or herself is at its height. The junior high school's emphasis on discipline

and teacher control, and its limited opportunities for student decision making, come at a time in development when adolescents are beginning to think of themselves as young adults who are becoming more responsible and deserve greater adult respect. A poor "fit" between the early adolescent and the classroom environment increases the risk of disengagement and school problems, especially for those early adolescents who were having difficulty succeeding in school academically prior to this school transition.³¹

As the preceding discussion explains, early-adolescent development is characterized by an increasing capacity for abstract thinking, desire for autonomy, orientation toward peers, and self-consciousness. It is a time when identity issues and concern over heterosexual relationships are salient. When they are adapting to these internal changes, adolescents need an environment that is both reasonably safe and intellectually challenging-one that provides a "zone of comfort" as well as challenging new opportunities for growth. The research studies reviewed here suggest that family, school, and other organized environments that are responsive and developmentally sensitive to the changes in young adolescents' needs and desires can facilitate positive development during the turbulent early-adolescent years.32

Conclusion

This article summarized the major developmental changes that take place from age 6 to age 14 and reviewed transformations in children's reasoning during middle child-hood and in physical development during puberty. It discussed the dramatic shifts in children's participation in the world beyond the family. In addition, it examined the key psychological challenges that mark the middle-childhood years (self-awareness, social comparison, and self-esteem) and the early-adolescent years (a drive for autonomy paired with a continuing need for close, trusting relationships with adults).

For most children this is an exciting time of positive growth and development, but for some (estimates range as high as 25% to 40%),²⁷ it is a time of declining motivation, mental health, and involvement with

schools and organized activity programs. The fit between the individual's psychological needs and the opportunities provided by the family, the school, and other programs contributes significantly to an individual child's response to the pressures of this period. For example, if there is a mismatch between the young person's desire for autonomy and the amount of independence offered at school or in other program settings, children and young adolescents are likely to develop a more negative view of these contexts and of themselves as participants. Similarly, if these settings produce stressful or superficial social relationships between youths and adults, children and young adolescents will not look to the adults in these settings as a source of emotional support and guidance.

There are clear implications of these findings for out-of-school programs. First, such programs provide a major nonfamilial

Out-of-school programs can provide a place where children and early adolescents can experiment, but where the adults are available to catch them if they start to get into trouble.

setting in which children and early adolescents can express their individuality, master new skills, and seek emotional support from adults. Second, programs that offer mixed-age groups and activities that highlight effort rather than competition can support the children's confidence in their ability to become productive, positive members of their communities. Such programs can offer the zone of safety and comfort that is crucial for healthy development by providing a place where children and early adolescents can experiment, but where the adults are available to catch them if they start to get into trouble. Third, the programs can design activities for children and early adolescents that are sensitive to the development that is so dramatic during this period by combining security and comfort with expanding leadership opportunities that recognize and respect children's increasing maturity. For instance, focus groups and rap sessions give

children and early adolescents a chance to discuss the issues that concern them while allowing significant adults to learn about their lives. Opportunities to engage in community service show young people new avenues for responsibility, while helping them feel like valued members of their community.

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