CHAPTER 13

Gender

Key Themes in Gender Development

- **Nature/Nurture** What roles do nature and nurture play in gender development?
- **Sociocultural Influence** How does the sociocultural context influence gender development?
- **Child's Active Role** How does the child play an active role in the process of gender development?
- **Continuity/Discontinuity** Is gender development continuous or discontinuous?
- **Individual Differences** How prominent are individual differences in gender development?
- **Interaction Among Domains** How does gender development interact with development in other domains?

"Nicky," one of the authors said to her then five-year-old son, "what do you think should be on the cover of this book? It's about children, you know."

"Well," he thought for a moment, "how about a picture of a child?"

"A boy or a girl?" asked the mother.

"How about one of each?" he suggested. The mother was pleased that her son chose a girl as well as a boy. She had tried hard to teach him to think about gender in nonstereotypical ways, and his willingness to include girls seemed to indicate that her efforts were successful.

"What should they be doing?" the mother continued.

"Well, how about having the boy play with a computer?" he quickly responded.

"And the girl?" she asked.

"I think she should have a tea party or something."

This five-year-old's response is consistent with many **gender stereotypes** that exist in our society, that is, our beliefs and expectations about the characteristics of females and males. Boys, according to these stereotypes, are active, aggressive, independent, and interested in science. Girls, on the other hand, are passive, nonaggressive, and socially oriented. At what ages and to what extent do children have knowledge of these stereotypes? Furthermore, are such common beliefs actually manifested in the everyday behaviors of children? Are any differences we might observe due to the biological makeup of males and females? What part does socialization play in this process? We will address these central questions in this chapter as we discuss **gender-role development,** the process by which children acquire the characteristics and behaviors prescribed for males and females in their culture.

Before the mid-1960s, most psychologists regarded the socialization of children into traditional masculine and feminine roles as both a natural and a desirable outcome of development. Behavioral sex differences were viewed as inevitable and were linked to comparable sex differences among nonhumans (Kohlberg, 1966; Mischel, 1966; Shaw & Darling, 1985). But changes in social values in the mid-1960s, especially those accompanying the women's movement, shifted the ways in which psychologists approached sex differences and gender-role socialization. Many of the questions that interest developmental psychologists today represent both a challenge to traditional assumptions about the nature and origins of gender roles and sex differences and a concerted effort to determine the developmental processes that underlie children's acquisition and enactment of gender roles.

gender stereotypes Expectations or beliefs that individuals within a given culture hold about the behaviors characteristic of males and females.

gender-role development Process by which individuals acquire the characteristics and behaviors prescribed by their culture for their sex. Also called *sex typing*.

Gender Stereotypes Versus Actual Sex Differences

Throughout the recorded history of Western civilization, females and males have been assumed to differ in temperament and interests, among other characteristics. Many of these beliefs persist unchanged in contemporary gender stereotypes.

The Stereotypes: What Are They?

Suppose a group of college students is asked to rate the "typical" boy or girl on a number of psychological attributes. Will they rate certain traits as more typical of males than of females, and vice versa? College students respond that characteristics such as independence, aggression, and self-confidence are associated with masculinity. In general, attributes such as these, which are associated with acting on the world, are classified as **instrumental.** In contrast, emotional expressiveness, kindness, and gentleness are linked with femininity. These perceived feminine characteristics are often classified as **expressive,** or associated with emotions and interactions with other people. Table 13.1 shows other traits often associated with masculinity and femininity (Martin, 1995).

TABLE 13.1
Stereotypic Characteristics Attributed to Males and Females

When college students were asked to rate a typical boy or girl on a number of personality traits, strong patterns emerged among traits that were seen as being associated with each sex. Male traits generally fall into a cluster called *instrumentality* and female traits into a cluster labeled *expressiveness*.

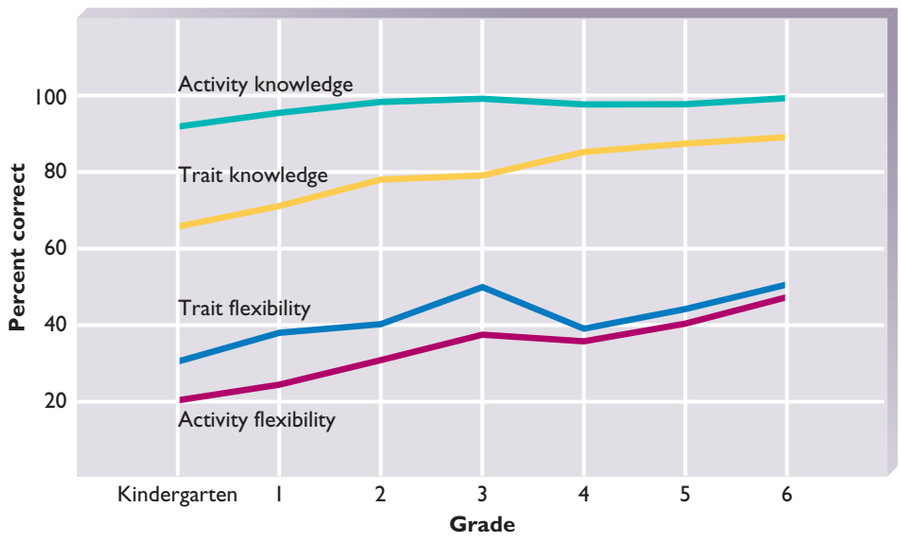
Item Type	Mean Typicality Ratings by Sex of Child Target[a]	
	Boys	Girls
Sex-typed Masculine[b]		
Self-reliant	5.05	3.69
Does dangerous things	4.96	2.57
Enjoys mechanical objects	5.57	2.68
Dominant	5.36	3.54
Enjoys rough play	6.09	3.07
Independent	4.95	3.59
Competitive	5.70	4.16
Noisy	5.78	3.93
Physically active	6.23	4.80
Aggressive	5.60	3.41
Conceited	4.38	3.46
Sex-typed Feminine[c]		
Gentle	3.21	5.36
Neat and clean	3.05	5.42
Sympathetic	3.42	5.33
Eager to soothe hurt feelings	3.35	5.33
Well-mannered	4.01	5.44
Cries and gets upset easily	3.20	4.95
Easily frightened	3.27	4.89
Soft-spoken	3.00	4.64
Helpful around the house	3.27	5.31
Gullible	3.74	4.33
Reliable	4.33	4.74
Truthful	4.31	4.91
Likeable	4.99	5.68
Nonsex-typed		
Adaptable	4.90	4.72

[a]Maximum scores = 7.0.
[b]Indicates that ratings for boys were significantly higher than for girls.
[c]Indicates that ratings for girls were significantly higher than for boys.

Source: Martin, 1995.

instrumental characteristics Characteristics associated with acting on the world; usually considered masculine.

expressive characteristics Characteristics associated with emotions or relationships with people; usually considered feminine.



Source: Serbin, Powlishta, & Gulko, 1993.

FIGURE 13.1
Developmental Trends in Gender-Role Knowledge

When kindergartners through sixth-graders were asked to identify which of twenty stereotyped objects were masculine and which were feminine, all children gave at least 90 percent correct answers (see the line for "activity knowledge"). If they were asked to indicate whether objects could be used by both sexes, a developmental increase in flexibility was also observed (see the line for "activity flexibility"). In addition, knowledge of stereotyped traits and flexibility with regard to those traits both increased over the age span studied.

These gender stereotypes are not limited to our own society. Researchers asked children and adults from thirty nations in North and South America, Europe, Africa, and Asia to indicate whether certain traits are more frequently associated with men or women in their culture. The results showed many cross-cultural similarities in the stereotypes adults attributed to males and females (Williams & Best, 1982).

Despite the many similarities in gender stereotypes across cultures, some differences occurred among nations in the specific characteristics attributed to males and females. For example, Italian adults stereotypically associated "endurance" with women, although most adults in other countries believed this is a masculine trait. Nigerian adults believed "affiliation" is neutral, whereas adults in other countries said it is a feminine characteristic. Thus we cannot say that specific characteristics are always attributed to males or to females. We can say, however, that the tendency to stereotype on the basis of sex is found in a variety of cultural settings.

KEY THEME
Sociocultural Influence

Children's Knowledge of Gender Stereotypes

Children begin to acquire gender-role stereotypes and employ them as guides for their behavior at a surprisingly early age—from about two years onward. At eighteen months of age, infants prefer to look at toys stereotypically associated with their own sex (Serbin et al., 2001). By age two, children believe that girls are nonaggressive, talk a lot, play with dolls, and will grow up to be nurses or teachers. In contrast, they say that boys are aggressive, play with trucks and cars, and will grow up to be the boss (Kuhn, Nash, & Brucken, 1978). Preschoolers' knowledge about gender stereotypes includes personality traits, occupations, appearance qualities, and household activities that are associated with males and females (Bauer, Liebl, & Stennes, 1998; Poulin-Dubois et al., 2002). Their thinking about gender stereotypes even extends beyond these qualities to items that may serve as metaphors for masculinity and femininity; they believe, for example, that fir trees and bears are "for boys" and that maple trees and butterflies are "for girls" (Leinbach, Hort, & Fagot, 1997).

By age six or seven, children's knowledge of gender stereotypes is well established. Lisa Serbin and her colleagues (Serbin, Powlishta, & Gulko, 1993) asked five- through twelve-year-olds to state whether twenty stereotyped objects (e.g., *hammer, rifle, stove, broom*) belonged to male or female categories. As Figure 13.1 indicates, all children, regardless of age, showed extensive knowledge of the stereotypes. The figure also shows that children's knowledge of stereotyped personality traits (e.g., *gentle, emotional, adventurous, messy*) expands through the middle school years. As children

By two to three years of age, children show a fairly extensive understanding of gender stereotypes, the beliefs about the characteristics of males and females. Through the early and middle school years, this knowledge becomes even more fully elaborated.

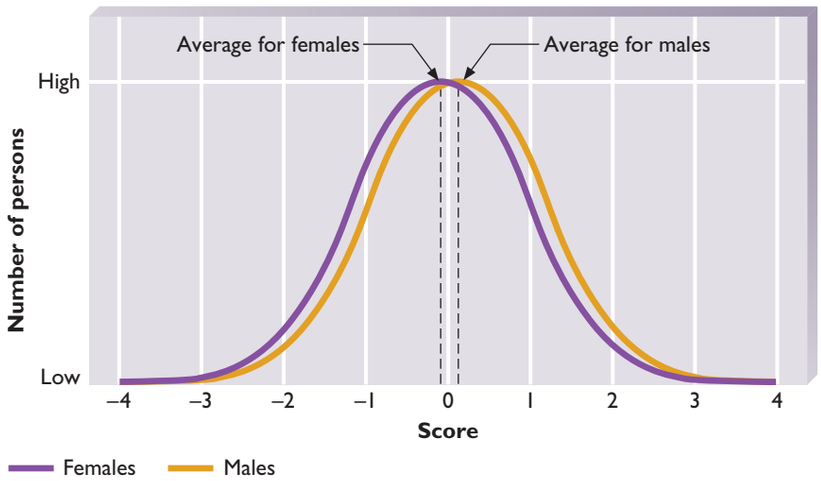
grow older, however, their knowledge of stereotypes also becomes more flexible in that they are more likely to say that both males and females can possess certain traits (Katz & Ksansnak, 1994; Levy, Taylor, & Gelman, 1995; Serbin et al., 1993). Other researchers have found that flexibility concerning gender stereotypes is especially high right when young adolescents experience a life transition that may involve reevaluation of past beliefs: entering junior high school. Later in adolescence, when individuals are more likely to be thinking about their future roles and responsibilities, flexibility regarding gender stereotypes declines (Alfieri, Ruble, & Higgins, 1996). Some researchers have described this return to traditional beliefs about gender during adolescence as *gender intensification* (Galambos, Almeida, & Petersen, 1990).

What Sex Differences Actually Exist?

In light of such durable and pervasive stereotypes about "femaleness" and "maleness," it is logical to ask whether researchers have documented actual differences in the characteristics or behaviors of females and males. For many human traits, the data show that average differences *between* the sexes are smaller than the variability in performance *within* each sex. Nonetheless, in some domains the characteristics of females and males have been found to differ.

● **Physical Attributes** Females and males physically differ in a number of ways, including the makeup of their chromosomes, their genitalia, and levels of certain hormones. Females are physically more mature at birth, whereas males show a special physical vulnerability during infancy. Compared with females, males are more likely to be miscarried, die in infancy, or develop hereditary diseases (Jacklin, 1989). Later in infancy and childhood, females walk, talk, and reach other developmental milestones earlier than males. Males, on the other hand, are more physically active and are more likely to engage in vigorous rough-and-tumble play (Eaton & Ennis, 1986; Pellegrini & Smith, 1998). By later childhood and adolescence, females reach puberty earlier and males develop greater height, weight, and muscle mass than females (Maccoby & Jacklin, 1974).

● **Cognition** One aspect of cognition for which males and females have been thought to differ is in verbal abilities. The popular belief has been that girls are more



Source: Adapted from Hyde, Fennema, & Lamon, 1990.

FIGURE 13.2
Sex Differences in Mathematics Skills

Although sex differences in mathematics skills do exist, the differences are quite small. This graph illustrates the size of the average sex differences. The horizontal axis represents scores converted to a standardized form.

skilled than boys at verbal tasks, a belief that was modestly substantiated by an early review of the relevant research (Maccoby & Jacklin, 1974). Meta-analyses of cognitive sex differences, however, indicate only small sex differences in verbal skills favoring females (Feingold, 1988; Hyde & Linn, 1988). Females have a slight advantage on tests that measure reading comprehension, spelling, word meaning, or grammar (Feingold, 1993; Halpern, 1997), but most researchers agree that the differences are not large enough to warrant much notice.

In another meta-analysis of more than a hundred studies of sex differences in mathematics skills, the investigators concluded that boys and girls showed no overall differences in performance (Hyde, Fennema, & Lamon, 1990). When the scores of participants of different ages and from specific groups were examined more closely, however, sex differences in certain aspects of mathematics performance did emerge. During elementary school, for example, girls showed a slight superiority over boys in the area of computation; in the high school and college years, on the other hand, males did moderately better than females on tests of mathematical problem solving. Among groups selected for exceptional performance (such as students in gifted and talented programs), males performed better than females in tests of mathematics. The scores of males on mathematics tests are more variable than the scores of females, at least for children in the United States (Feingold, 1992). When differences across all the studies are averaged, males show only a very slight advantage. Figure 13.2 illustrates the overall magnitude of this sex difference.

In fact, the only notable sex difference in cognitive skills currently supported by empirical evidence involves visual-spatial abilities. Visual-spatial skills include a number of processes, all of which require the ability to visualize and transform figures or objects in the mind. Figure 13.3 illustrates three tests of visual-spatial skills: spatial perception, mental rotation, and spatial visualization. As you can see, spatial perception tasks require participants to ignore distracting information to locate horizontal and vertical orientation. Mental rotation tasks demand that participants transform two- and three-dimensional figures "in their heads." Spatial visualization tasks require them to analyze relationships among different spatial representations.

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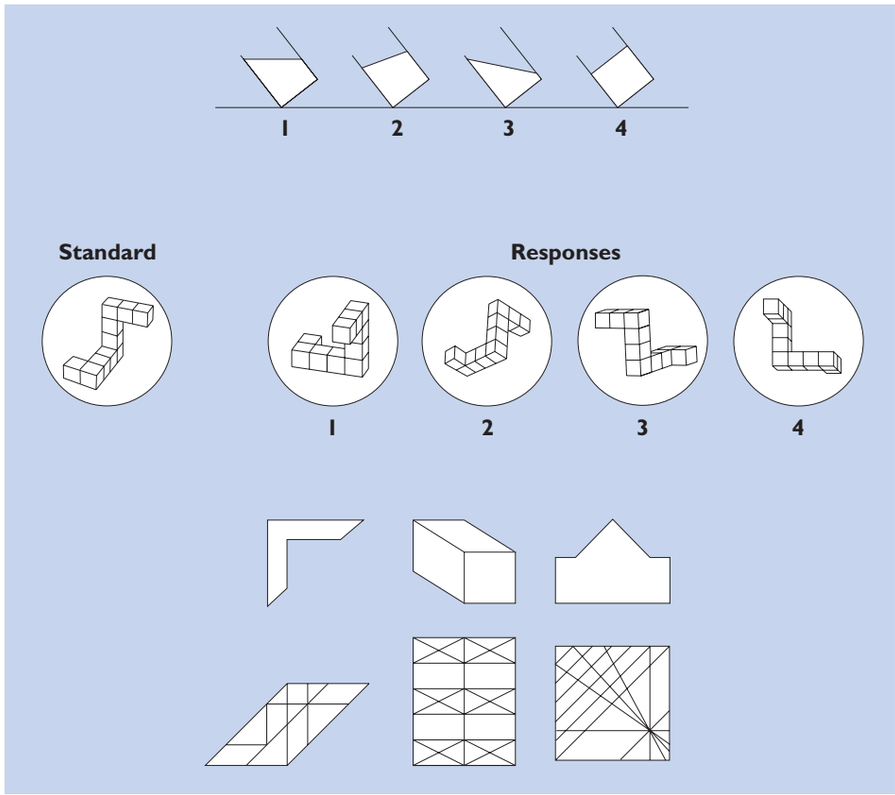
A Mental Rotation Test

In general, results indicate no sex differences on spatial visualization tasks. Males do, however, show superior performance on mental rotation and, to a lesser extent, spatial perception (the tasks depicted in the middle and top portions of Figure 13.3, respectively) (Linn & Peterson, 1985, 1986; Voyer, Voyer, & Bryden, 1995). As with mathematical skills, boys show greater variability in their visual-spatial scores than do girls in our society (Feingold, 1992). Sex differences in visual-spatial skills are evident in children by age four-and-a-half years (Levine et al., 1999), but the magnitude of sex differences in this domain increases with age (Voyer et al., 1995).

FIGURE 13.3
Sex Differences in Visual-Spatial Skills

Tests of visual-spatial skills typically assess spatial perception (top), mental rotation ability (middle), or spatial visualization (bottom). In the top panel, participants are asked to indicate which bottle has a horizontal water line. In the middle panel, participants must identify the two responses that depict rotated versions of the standard. In the bottom panel, participants are asked to identify the simple geometric figure on the top within the more complex figure underneath. Generally, males perform better than females on spatial perception and mental rotation tasks.



Source: Adapted from Linn & Petersen, 1985.

● **Social Behaviors** Researchers who have examined the results of hundreds of studies of social behaviors and personality characteristics have concluded that few actual sex differences exist in the area of social behaviors (Feingold, 1994a; Maccoby & Jacklin, 1974). Although average scores of boys and girls consistently differ in some areas, the performance of children within each sex shows considerable variability.

One of the most consistent findings in the research on sex differences is that, beginning in the preschool years, males are more aggressive than females. They engage in more rough-and-tumble play, display more physical aggression, try to dominate peers, and subsequently display more antisocial behaviors than girls (Block, 1983; Huston, 1985; Loeber & Hay, 1997). Meta-analyses substantiate that sex differences in aggression are greatest among preschoolers and decrease through the college years (Eagly & Steffen, 1986; Hyde, 1984, 1986). Even though males generally are more aggressive than females, however, the magnitude of the sex difference varies as a function of where the aggression occurs and the type of aggression being measured. The largest sex differences are found in naturalistic settings, such as playgrounds, and when physical aggression is being measured. Conclusions about sex differences in aggression must be tempered by how this construct is defined, however. When aggression is described as an attempt to harm another person through manipulation, gossip, or excluding peers from a social group (called *indirect* or *relational aggression*), girls are found to be more aggressive than boys starting in the preschool years (Bjorkqvist, 1994; Crick, Casas, & Mosher, 1997; Crick & Grotpeter, 1995).

Other sex differences occur in the verbal and nonverbal behaviors that boys and girls use as they participate in social communication. Boys generally issue more directive statements (e.g., "Put that block over here!"), attempt to gain the floor, and engage in one-upmanship as they speak. Girls, on the other hand, tend to verbally reinforce their conversation partners and follow the ongoing themes of conversations (Carli & Bukatko, 2000). Girls are especially likely to display these affiliative behaviors

One of the most consistent sex differences is the tendency for boys to display more physical aggression than girls, especially during the preschool years. Girls, on the other hand, are more likely to show relational aggression than boys.

when they are interacting with other girls (Strough & Berg, 2000). Girls also display more social smiles and gazing than boys do, especially in late adolescence (Eisenberg & Lennon, 1983; Hall & Halberstadt, 1986).

● **Emotions** To some degree, girls show a heightened sensitivity to emotions compared with boys. For example, female children and adults from widely varying cultures are better than males at identifying the positive and negative emotions displayed on faces (Hall, 1984). Girls also tend to display more positive and negative emotions themselves (Casey, 1993), although boys tend to express one particular emotion—anger—more often than do girls (Hubbard, 2001). Females also show more anxieties and worrying about social and problem-solving situations than do males (Block, 1983; LaGreca & Lopez, 1998; Silverman, LaGreca, & Wasserstein, 1995). Such findings must be interpreted with caution, however, because females may simply be more likely than males to report their feelings and emotional states. The case of empathy provides a good example of this problem. Females report that they are more empathic and cry more than males do, but no sex differences emerge when physiological or unobtrusive measures are used to assess empathy (Eisenberg & Lennon, 1983).

In addition, some researchers have found sex differences in self-esteem. Surveys of middle-class girls indicate that when they reach adolescence, girls report a decline in their feelings about their self-worth (American Association of University Women, 1992). More recent research, however, indicates that the size of the difference in self-esteem between boys and girls is generally small (Kling et al., 1999) and that there is more variability in self-esteem within groups of boys and girls than there is between them (Eccles et al., 1999).

Perhaps of greatest concern is the fact that, beginning in adolescence, girls show a sharp rise in the rates of depression they experience compared with boys (see the chapter titled "Emotion"); by late adolescence, they are twice as likely as boys to be depressed. According to Susan Nolen-Hoeksma (2001), these findings can be understood as the result of several factors that girls experience to a greater degree than boys: greater exposure to stressful life events (e.g., sexual abuse), greater biological responses to stress, and coping styles that involve focusing inward on feelings of distress (Nolen-Hoeksma, 2001). Because adolescence is the time during which we usually begin to see this gender difference, researchers are trying to understand how the complex changes that occur at this developmental stage might be responsible.

Sex Differences in Perspective

Perhaps because of our tendency to think in terms of gender stereotypes, we might assume sex differences will be numerous. In fact, research on actual sex differences indicates that the behavior of people in general shows great variability and that males and females often are more alike than different. If the research indicates more similarities than differences between males and females, why do stereotypical beliefs persist? One explanation may be that we notice, and therefore retain our beliefs, when boys and girls display behaviors consistent with stereotypes. In contrast, when a girl or a boy behaves in a manner inconsistent with a stereotype, we ascribe this pattern to an individual difference. Thus, when Billy fights (a stereotypically masculine activity), we say that "boys will be boys." But when he cooks and helps around the house in stereotypically feminine tasks, we comment on how "helpful" (not how "feminine") he is compared with other boys his age. Perhaps, too, stereotypes result from the tendency of children (and adults) to form cognitive categories of social groups (Martin, 1991). On seeing one similarity among people in a group (e.g., in terms of physical characteristics), we may be tempted to conclude that they resemble one another in other ways, too.

FOR YOUR REVIEW

- What are the characteristics associated with masculine and feminine stereotypes? What do cross-cultural studies reveal about the nature of gender stereotypes?
- How do children's concepts of gender stereotypes change with age?
- What actual sex differences exist in the physical, cognitive, social, and emotional domains?

Theories of Gender-Role Development

What are the origins of sex differences in behavior? Even though contemporary research shows that actual sex differences in behavior are relatively few, boys and girls still show different profiles in some domains of behavior. Three major theoretical perspectives—biological, social learning, and cognitive theories—each make unique and important contributions to our understanding of these behaviors.

Biological Theories

KEY THEME
Nature/Nurture

Biologically based explanations for sex differences focus largely on the influence of chromosomes, hormones, and the structure of the brain on behavior. These factors often work in ways that illustrate the complex interactions of biological systems to produce sex-differentiated behaviors.

As we saw in the chapter titled "Genetics and Heredity," the presence of an X or a Y sex chromosome begins a complex process that leads to sexual differentiation. Between six and twelve weeks after conception, the XY chromosomal configuration leads to the development of testes and the secretion of a class of male hormones called **androgens,** a process that results in further sexual differentiation. The penis and scrotum develop in response to the metabolism of *testosterone,* an androgen that is actually present in both sexes but in greater amounts in males (Whalen, 1984). In the absence of an XY configuration and the associated greater amounts of androgens, the female structures develop (Breedlove, 1994; Hood et al., 1987). These differences in biological structures form the bases by which a child is labeled "boy" or "girl," the social categorization of biological sex.

androgen Class of male or masculinizing hormones.

● **Hormones and Behavior** Prenatal exposure to hormones, particularly androgens, influences the developing fetus in ways that may have an impact on biology

and, perhaps, postnatal behavior. Most important for our discussion, androgens influence the developing organization of the central nervous system and the brain (Gorski, 1980; MacLusky & Naftolin, 1981; Overman et al., 1997). Hormone-related sex differences in the central nervous system may, in turn, have important influences on behavior and abilities.

Take the example of aggression. Explanations of sex differences in aggression from a biological perspective have relied largely on experiments in which androgens were administered systematically to female animals during prenatal development. The animal studies show that these hormonally treated females subsequently display increased aggressive behaviors, such as threats and rough-and-tumble play, compared with normally developing females. These findings have been replicated in rats, monkeys, and a number of other species (Goy, 1970; Parsons, 1980).

Although this type of evidence implies a causal link between male hormones and aggression, some controversy concerning the relationship exists (Tieger, 1980). First, although hormones have been shown to precede and presumably influence certain behaviors, such as aggression, those behaviors may themselves have an impact on hormone levels. That is, levels of hormones, including testosterone, can also change *in response to* changes in the environment (Hood et al., 1987). Among nonhuman males, for example, increases in androgen levels frequently follow, rather than precede, an aggressive encounter (Hood et al., 1987). Thus the link between aggression and levels of androgens is not unidirectional, and it is difficult to make causal statements. Second, because human beings have a nervous system that differs in important ways from those of other species—particularly in the size of the cortex, which directs voluntary behavior—it is not clear that findings from animal studies can be generalized to humans (Fausto-Sterling, 1992). Nevertheless (and still keeping the aforementioned cautions in mind), the data from a recent study with humans show that the more testosterone women had in their bloodstream during pregnancy, the more likely their daughters were to show preferences for masculine activities when they were preschoolers. In contrast, social factors such as parental sex-role beliefs did not predict these girls' behaviors (Hines et al., 2002).

Atypical Development

Hormonal Disorders in Children

Among humans, there are several conditions in which genetic males or females may be exposed to a hormonal environment that is not typical for their sex. One such disorder is *congenital adrenal hyperplasia (CAH),* a condition that occurs in about one in five thousand to one in fifteen thousand births (Miller & Levine, 1987). This genetic disorder causes a deficiency in the production of adrenal steroids, with the result that high levels of androgens begin to be produced during the prenatal period. If the child is a genetic female, for example, she will be born with masculinized genitalia. Usually her physical appearance is surgically corrected, hormone therapy is begun to regulate the levels of androgens circulating in her body, and the child is raised as a girl. Even following treatment, however, CAH girls have been found to show many behavioral patterns that are "typical" of boys. They prefer toys geared for boys, like rough-and-tumble play, and show enhanced visual-spatial skills (Collaer & Hines, 1995; Hampson, Rovet, & Altmann, 1998).

Among boys, a failure of androgen to bind with its receptors can result in *androgen insensitivity syndrome (AI)*. Because the boy is born with female-looking genitalia, he is usually raised as a girl; the disorder is typically discovered at puberty, when menstruation fails to begin (Breedlove, 1994). These children commonly show "female" play interests and visual-spatial skills that are poorer than those of normal females who served as controls (Collaer & Hines, 1995).

It is tempting to conclude from these unusual hormonal disorders that biological factors are responsible for sex differences in patterns of social behaviors and cognitive skills. CAH girls do, in fact, have masculine-typed behaviors and were exposed to unusually high levels of androgens even though they were later socialized as girls. AI boys have lower levels of androgens and, even though they are socialized as girls, their performance on some cognitive tasks is actually lower than that of the average female. Thus, it is difficult to argue simply for the effect of socialization on their behavior. On the other hand, studies of androgenized girls are difficult to interpret because parents were aware of their daughters' masculinized appearance at birth and may have tolerated or even encouraged more "boylike" behaviors. Moreover, their enhanced visual-spatial skills may be the result of their masculine play styles rather than hormone levels per se (Liben et al., 2002). Thus although these studies suggest a role for biology in the emergence of some sex-linked behaviors, it is still premature to rule out the effects of socialization.

● **Brain Lateralization** A second way in which biology can influence sex differences in behavior is through the organization and functions of the brain. A prominent biological explanation for sex differences in visual-spatial skills involves the process known as *lateralization of the brain*. During the course of development, as we saw in the chapter titled "Physical Growth and Motor Skills," the two halves of the brain become increasingly specialized to handle different types of information, such as speech perception and speech production. According to one version of the lateralization hypothesis, girls' brains mature more quickly and lateralize earlier than boys'. Because verbal skills are thought to develop sooner than visual-spatial skills, and because rapid maturation of the brain is assumed to produce less eventual lateralization, the verbal skills of girls are presumed to be more evenly distributed across the hemispheres. Verbal processing in the right and left hemispheres, in turn, interferes with the visual-spatial processing that usually takes place predominantly in the right hemisphere. Because lateralization takes longer in boys, their cerebral hemispheres are thought to become more specialized than girls'. The net result is that their visual-spatial skills are stronger. Some research evidence confirms that children (regardless of sex) who mature early score better on verbal tasks than on spatial tasks, whereas the reverse pattern holds for late maturers (Waber, 1976).

Before we accept the lateralization hypothesis, however, we should note that there are also nonbiological explanations of sex differences in visual-spatial skills. One such explanation relies on the contrasting play experiences of boys and girls. According to this formulation, masculine play activities, such as using building blocks or video games, facilitate the development of visual-spatial skills in boys (Block, 1983; Greenfield, 1994). Evidence for this explanation was found in a study in which ten- to eleven-year-old boys and girls were given practice in playing either a visual-spatial or a verbal video game. The results showed that both boys and girls who played the visual-spatial game improved in their visual spatial skills, whereas those who played the word game did not improve (Subrahmanyam & Greenfield, 1994). Thus sex-typed play activities may account, at least in part, for sex differences in visual-spatial skills.

No one doubts that explanations of the development of gender roles must start on some level with biology. However, you have seen in the preceding discussion, as well as throughout this text, that biology and environment interact in complex and sometimes bidirectional ways. Elucidating the precise ways in which hormones and brain structures are responsible for or combine with experiences to produce the behavioral tendencies of boys and girls remains a major challenge for researchers.

Social Learning Theory

One of the primary mechanisms accounting for sex differences in behavior, social learning theorists maintain, is sex-differentiated treatment of boys and girls. According to this position, boys and girls are reinforced and punished differentially for

specific behaviors, which leads them to behave in sex-typed ways. Girls, for example, may be rewarded for playing with dolls and punished for climbing trees, whereas boys may receive the opposite treatment. Thus, because children are motivated to seek reinforcement and avoid punishment, they will behave in a sex-typed fashion.

Children attend both to the consequences of their own behavior and to the consequences others face for their behavior. In fact, imitation, or modeling, may be an even more powerful means by which children learn gender roles. By observing the experiences of other people, children develop expectations for reinforcement and punishment of their own behavior. These expectations may influence their behavior as strongly as the actual experiences of reward or punishment do (Bandura, 1969, 1977a). Children have numerous opportunities to observe models behaving in gender-stereotypic ways in the home, in the outside world, and in the media. Recent studies show that gender stereotypes are frequently evident in television, video games, and children's literature (Dietz, 1998; Furnham & Mak, 1999; Turner-Bowker, 1996). They also show that, within families, women still do the bulk of household tasks such as cooking and cleaning (Coltrane, 2000). Each time a child sees that Dad fixes things around the house and Mom does the cleaning, or that most little boys play baseball and little girls play house, she is adding to her growing storehouse of sex-typed behaviors.

According to social learning theory, a powerful vehicle for the transmission of gender roles is imitation. Parents can be especially potent models for gender-typed behaviors. Thus the roles they take on in the household, as well as their attitudes and beliefs, can have an impact on the gender-role development of their children.

● **Imitation of Sex-Typed Behaviors** Several factors influence whether children will imitate the sex-typed behaviors of others. Albert Bandura and other researchers have proposed that children's *attention* to models in the first place is influenced by both the sex of the model and the **sex typicality** of the model's behavior, that is, how characteristic it is of the model's own sex (Bandura, 1977a; Perry & Bussey, 1979). According to this hypothesis, boys would, in general, be more likely than girls to attend to the behavior of male models, although they would be less likely to attend to a male model who was exhibiting "feminine" behavior. The prediction that individuals will pay greater attention to same-sex models is based on the notion that observation of same-sex models should provide children with greater information about potential consequences for their own behavior. In addition, Bandura suggests, children *recognize* that certain behaviors are sex-typed, especially as they observe the frequency with which males and females, as a group, perform certain behaviors. Finally, Bandura (1977a) proposes that *motivational* factors, such as reward seeking and attempts to retain a sense of mastery, will influence behavior in a variety of realms. As children grow older, they rely less on others to regulate their behavior and more on *self-regulation,* based on personal standards of gender-appropriate behavior (Bandura, 1986).

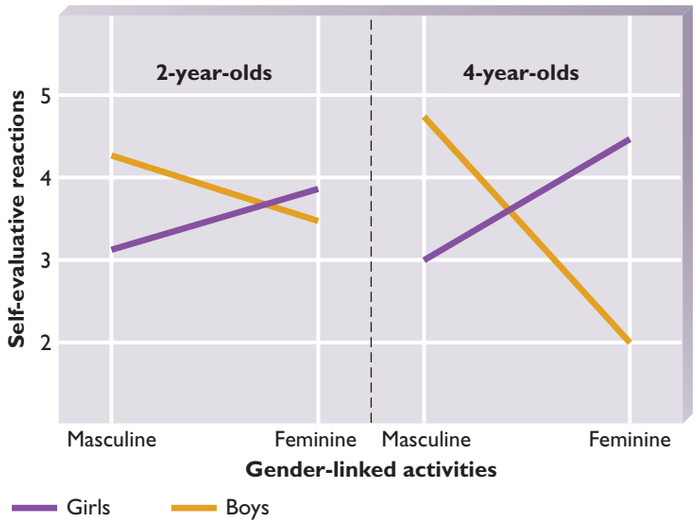
Research has supported several of the predictions of social learning theory. Children are indeed more likely to imitate same-sex than other-sex models (Bussey & Bandura, 1984; Bussey & Perry, 1982). Thus same-sex parents, peers, and characters in the media can be powerful influences on the child. In addition, children are more likely to imitate models who behave in sex-typical ways than models who behave in sex-atypical ways (Perry & Bussey, 1979). Finally, self-regulation of sex-typed behavior does seem to increase with development, as a study by Kay Bussey and Albert Bandura (1992) shows. Two- to four-year-olds privately rated how they would feel if they played with a series of toys, some of which were masculine (e.g., a dump truck), some feminine (e.g., a baby doll), and some neutral (e.g., a xylophone). As Figure 13.4 shows, younger children expressed relatively neutral self-evaluations regarding playing with masculine and feminine toys. Older children, in contrast, indicated more positive self-evaluations when visualizing themselves playing with toys geared for their own sex.

Social learning theory makes an important contribution to our understanding of gender-role development in that it provides a way for us to understand how broader societal beliefs and values are transmitted to individual children. As Bussey and Bandura (1999) state, labeling boys as boys and girls as girls would have very little consequence if there were no social repercussions to acting in masculine and feminine ways.

sex typicality Extent to which a behavior is usually associated with one sex as opposed to the other.

FIGURE 13.4
Self-Evaluations During Same-Sex Activities

Two- and four-year-olds rated how they would feel while playing with masculine, feminine, or neutral toys. The higher the score, the more favorable the self-evaluation. As the graph indicates, younger children, especially girls, gave relatively neutral self-evaluations for playing with masculine and feminine toys. In contrast, older children said they would feel better about themselves when they played with same-sex toys.



Source: Bussey & Bandura, 1992.

KEY THEME
Sociocultural Influence

● **Cross-Cultural Patterns of Sex Differences** The contexts in which gender-role development occurs are many and varied. Do gender roles differ according to the beliefs and demands of a specific culture? Cross-cultural studies can shed some light on biological versus social learning explanations for sex typing. If sex typing results solely from biological influences, we would expect to see great unanimity in gender roles across periods of history and among different cultures. If, on the other hand, gender roles reflect values that are peculiar to a given era or culture, we would expect to see variability in the characteristics defined as masculine and feminine by different cultures or at different points in time.

Perhaps the most comprehensive cross-cultural comparison of children and the factors that influence their development was conducted by Beatrice Whiting and Carolyn Pope Edwards. In their Six-Culture study, these researchers examined aggression, nurturance, help seeking, sociability, and other social behaviors in children ages three to eleven living in Kenya, Okinawa, India, the Phillippines, Mexico, and the

Similar gender-typed behaviors have been observed in several different cultures, including Mexico, this girl's home. Women and girls are expected to participate in household tasks and the care of children. Variations in gender roles across cultures have also been observed, however, suggesting that biology alone cannot account for their occurrence.

United States (Whiting & Edwards, 1988; Whiting & Whiting, 1975). The results showed that differences between boys and girls were more exaggerated in some cultures than in others; in fact, they were least pronounced for the American children in the sample. Furthermore, sex differences between males and females diminished when both boys and girls were involved in household tasks, particularly the care of younger siblings. For example, Nyansango boys in East Africa scored higher than girls on their tendency to offer help and support to others; they were also as likely as girls to retreat from aggression. Interestingly, many boys in this culture tend to babies and perform other domestic chores, tasks that encourage nurturance and collaboration.

The finding that many resemblances were observed in the sex-typed behaviors of children from these diverse cultures is consistent with a biological explanation of gender-role development. At the same time, the variation that occurs in roles and characteristics across cultures points to the undeniable influence of socialization experiences (Best & Williams, 1993).

KEY THEME
Nature/Nurture

Cognitive-Developmental Theories

KEY THEME
Interaction Among Domains

Cognitive-developmental theories focus on the ways children understand gender roles in general and themselves as males or females in particular. In cognitive-developmental theories, *gender* is emphasized as a conceptual category, a way of classifying people on the basis of their overt appearance or behaviors.

● **Kohlberg's Cognitive-Developmental Theory** Lawrence Kohlberg (1966) proposed that gender roles emerge as a consequence of stagelike developments in cognition. The most basic of these cognitive milestones is acquisition of **gender identity,** the knowledge that self and others are female or male. This concept, which is acquired between ages two and three years, is crucial to later gender-role development because it provides a basic categorizing principle with which children begin to divide the world. After acquiring gender identity, around their fourth birthday children develop **gender stability**, a sense that gender does not change over time. Children who have acquired gender stability recognize that they were born one sex and will grow up to be a member of that same sex. Despite this knowledge, however, they may not yet be aware of the fact that genitalia determine biological sex. Rather, children assume external factors (such as clothing or hair length) are the determinants of sex. Thus a young boy may believe he was a baby boy and will grow up to be a "daddy" (gender stability), but only if his behavior and physical characteristics (such as hair length) remain masculine. By age six, most children acquire **gender constancy,** the awareness that changes in external characteristics, behaviors, or desires do not lead to a change in biological sex. Thus a boy may wear a dress and a girl may play with toy soldiers without altering their respective biological sexes. For Kohlberg, the acquisition of gender constancy marks the child's mature awareness of the concept of gender differentiation.

Because children value both their own sex and themselves, they are motivated to behave in a gender-typical fashion. From Kohlberg's perspective, cognitive development facilitates *self-socialization* among children. Kohlberg believed that children are internally motivated by their positive self- and same-sex evaluations to behave in a manner consonant with their conceptions of what is sex-appropriate. External motivators (such as reinforcements and punishments) are of minimal importance in the process of self-socialization.

Research has confirmed that children progress from attaining gender identity to gender stability and, finally, gender constancy from about two to nine years of age (Fagot, 1985; Slaby & Frey, 1975; Szkrybalo & Ruble, 1999). This trend appears among children from several cultures, including Argentina, Belize, Kenya, Nepal, and American Samoa (DeLisi & Gallagher, 1991; Munroe, Shimmin, & Munroe, 1984). At about eighteen months of age, children show some knowledge of gender categories by matching up the faces and voices of adult males and females (Poulin-Dubois, Serbin, & Derbyshire, 1998). Between ages two and three, most children are

gender identity Knowledge, usually gained by age three years, that one is male or female.

gender stability Knowledge, usually gained by age four years, that one's gender does not change over time.

gender constancy Knowledge, usually gained around age six or seven years, that one's gender does not change as a result of alterations in appearance, behaviors, or desires.

KEY THEME
Individual Differences

able to label themselves as male or female (Huston, 1985). Precisely when children develop this distinction can forecast subsequent patterns of behavior. Beverly Fagot and Mary Leinbach (1989) found that some children developed gender identity early (before age twenty-eight months) and others not until later. Boys and girls who were early identifiers engaged in significantly more gender-typical play, such as play with building toys for boys and doll play for girls, than did late identifiers. At two to three years of age, children who are able to apply gender labels correctly to others also have greater knowledge of gender stereotypes (Fagot, Leinbach, & O'Boyle, 1992).

How does gender identity develop? Perhaps parents and others provide this information directly by saying things to their young children such as "There's another little boy just like you" or "Be a good girl now, won't you?" Beverly Fagot's research also shows that children who are adept at using gender labels tend to have mothers who engage in sex-typed play with their children and espouse traditional beliefs about gender roles themselves (Fagot et al., 1992). Many researchers contend, however, that the messages about gender roles are so clear and pervasive in our society that, even aside from the role parents may play, children cannot help but notice them and categorize themselves as males or females.

● **Gender Schema Theory** Another cognitive-developmental theory is *gender schema theory* (Bem, 1981; Martin & Halverson, 1981, 1987). Like Kohlberg's theory, gender schema theory stresses the importance of the acquisition of gender identity and children's intrinsic motivations to behave in a gender-typical manner. Unlike Kohlberg's theory, however, gender schema theory does not stress the attainment of gender constancy; rather, it focuses on the influence of children's active construction of gender knowledge on their behavior (Bem, 1981; Martin & Halverson, 1987; Signorella, 1987).

KEY THEME
Child's Active Role

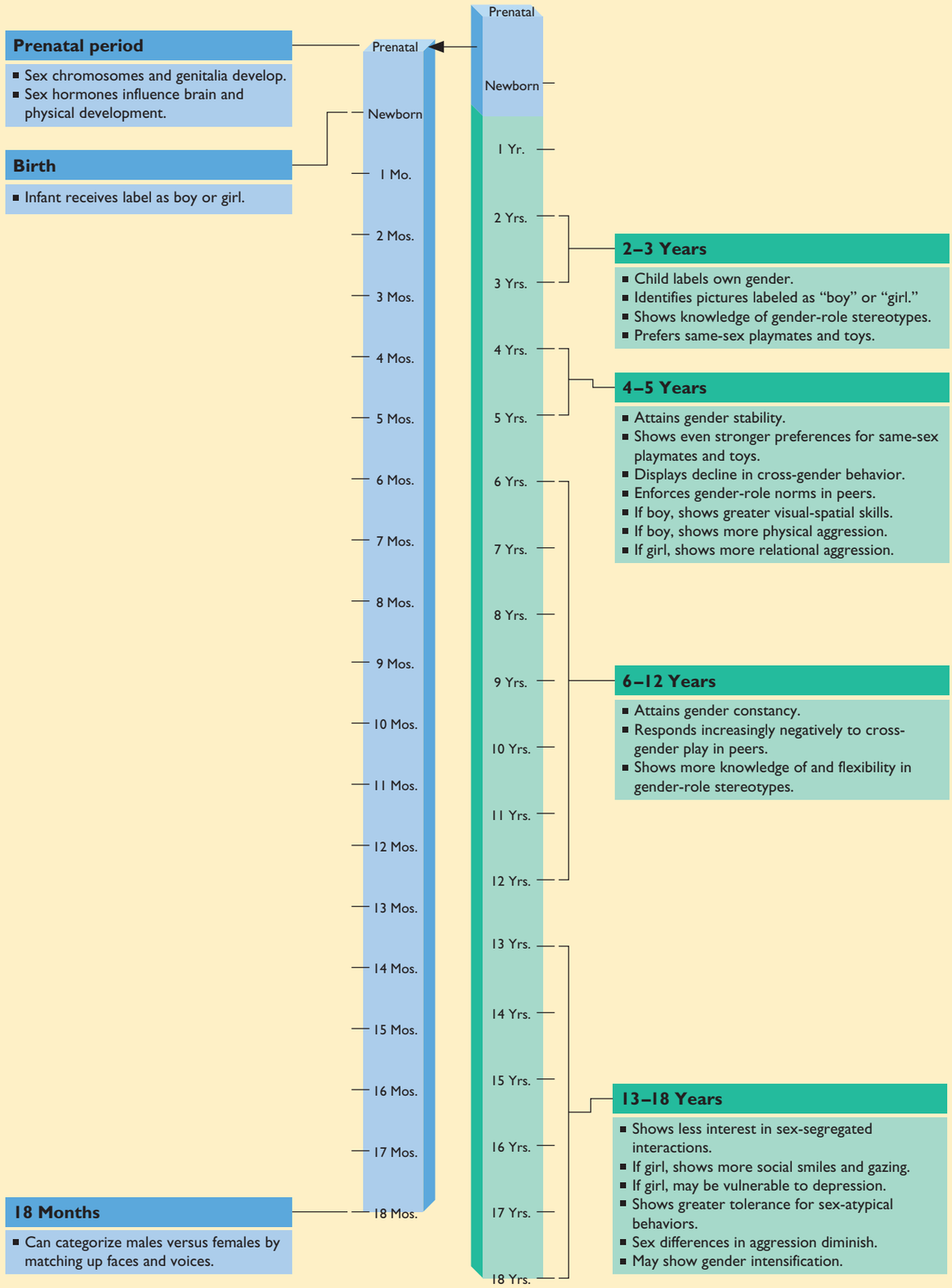
Carol Martin and Charles Halverson (1981) have proposed that children first acquire gender identity and then, in their attempts to create order in their social worlds, begin to construct two **gender schemas,** or cognitive organizing structures for information relevant to gender. The first one, the *same-sex/opposite-sex schema,* refers to the child's knowledge of one sex or the other. This is a fairly primitive cognitive structure composed largely of gender stereotypes, such as "boys fix cars" and "girls sew." Children also develop a second, more elaborate gender schema about behaviors relevant to their own sex. This *own-sex schema* provides a basis for guiding children's behavior. Thus, even though both boys and girls know that girls sew, girls are more likely to be motivated to learn to sew, whereas they may not want to learn how to fix a car. Researchers have confirmed that children explore and prefer neutral objects labeled as intended for their own sex more than they do for objects labeled for the other sex. Moreover, up to one week later, children remember more details about the "same-sex" objects than they do about the "other-sex" objects, even when they are offered a reward for remembering details (Bradbard et al., 1986; Martin, Eisenbud, & Rose, 1995).

KEY THEME
Individual Differences

According to Martin and Halverson (1981), children's gender schemas serve as a potent means of organizing information about their social worlds. Some children tend to be *gender schematic;* that is, they possess a strong gender schema, exhibit more consistent sex typing in their behavior, and process information along gender lines. In contrast, children who are *gender aschematic* possess a weaker gender schema, are less sex typed behaviorally, and focus their attention on aspects of information that are not related to gender. Gender-schematic children often distort information according to their beliefs about gender and are unlikely to remember events that are inconsistent with those beliefs. For example, gender-schematic children find it difficult to remember information about pictures of people engaged in sex-atypical activities, such as a boy playing with a doll, whereas they can easily remember information about people engaged in sex-typical activities, such as a girl playing with a tea set (Signorella, 1987; Welch-Ross & Schmidt, 1996). These effects are apparent as early as age twenty-five months, at least among boys (Bauer, 1993). Even more dramatic is the finding that children distort stereotype-inconsistent

gender schema Cognitive organizing structure for information relevant to sex typing.

CHRONOLOGY: *Gender Development*



This chart describes the sequence of gender-role development based on the findings of research. Children often show individual differences in the exact ages at which they display the various developmental achievements outlined here.

information by actually changing the sex of the person engaged in the sex-atypical behavior. Gender-schematic children who see a picture of a boy playing with a doll are more likely to remember seeing a picture of a girl playing with a doll than a picture of a boy playing with a gender-typical toy (Carter & Levy, 1988).

Why do many children become gender schematic? According to Bem (1983), children become gender schematic to the extent that they experience gender as a relevant social category. Thus, for example, when differences between males and females are frequently highlighted by parents, teachers, or peers, children themselves will use gender as a way to classify social information. Furthermore, both peers and adults in our society stress children's conformity to gender-typical roles, a fact that makes it difficult for them to become truly gender aschematic.

To sum up, each of the preceding theories has some value for explaining the different aspects of sex differences, many of which are outlined in the Gender Development chronology. The biological theories provide a basis for understanding the physiological underpinnings of male and female behavior. Social learning theory provides a mechanism for explaining how children learn discrete elements of sex-typical behavior. Cognitive-developmental approaches explain how children's concepts of gender become integrated in their minds. Although researchers have obtained data to support each theoretical position, none of the theories taken alone is adequate to explain the multifaceted nature of this aspect of development. An important task for researchers is to identify how biology, experience, and thought combine to produce masculine and feminine behavior patterns.

FOR YOUR REVIEW

- What are the major ways in which biology is thought to influence gender-role development? What specific research findings support a biological perspective? What research findings challenge the idea that biology alone is responsible for gender-role development?
- How does social learning theory account for gender-role development? What specific research findings support the social learning perspective?
- What are the essential features of Kohlberg's cognitive-developmental theory of gender-role development? What specific research findings support Kohlberg's theory?
- What are the elements of gender schema theory? What specific research findings support gender schema theory?

The Socialization of Gender Roles

KEY THEME
Nature/Nurture

Whatever biological tendencies are associated with being a male and a female, it is worth exploring further the influences of the social environment on gender-role development and how they intersect with the child's developing cognitions about gender. Particularly if we are concerned about the gender-associated problems children face, whether it be aggression among boys or depression among girls, we need to understand how social experiences can promote optimal development for both sexes.

The earliest messages about the social world, of course, come from the child's parents. From the moment of birth, when parents in our culture ask, "Is it a boy or a girl?," the sex of their child is a very prominent characteristic, one that elicits specific behaviors and reactions from mother and father. As children branch out to social relationships with peers, gender-role socialization continues in very powerful ways—in the games children play, the relationships they form, and how they react to one another's behaviors. Finally, another significant influence on gender-role development is the

child's experiences in schools, in which teachers and the instructional materials they use can confirm (or disconfirm) early gender-role beliefs and behaviors.

The Influence of Parents

Traditionally, developmental psychologists have believed one of the most important sources of information about gender for children is the behavior of their parents and the environment parents create (Katz, 1987). Sometimes the messages are subtle. Parents commonly provide their children with sex-differentiated toys and room furnishings (Rheingold & Cook, 1975). They buy sports equipment, tools, and vehicles for their sons and dolls and doll furniture for their daughters. Boys' rooms typically are decorated in blue, girls' in yellow (Pomerleau et al., 1990). When parents supply boys and girls with different physical environments, they send messages that boys are indeed different from girls and set sex-related limits on the types of behavior that are acceptable and appropriate.

Another way in which parents influence their children's gender-role development is through their own general beliefs about masculine and feminine roles. Many parents believe children as young as two years differ along gender-stereotypic lines (McGuire, 1988). They report, for example, that their own sons like sports, enjoy using tools, and are energetic. On the other hand, parents of girls say their daughters like to be admired, enjoy playing with dolls, and like clothes. Parent's gender beliefs are related to their children's gender beliefs (Tenenbaum & Leaper, 2002). And those beliefs are frequently translated into sex-differentiated patterns in the types of chores boys and girls are assigned to do around the house: boys take out the garbage and mow the lawn; girls do more chores within the house, such as cleaning and cooking (Goodnow, 1988; Lackey, 1989). The tendency of children to participate in household tasks associated with their gender increases in early adolescence, especially if their own parents assume traditional roles in household tasks or parents openly encourage traditional chores (Antill et al., 1996; Crouter, Manke, & McHale, 1995).

● **Parental Behaviors** Sometimes parents' messages about gender are more direct. Research shows that parents treat children differently on the basis of sex in early infancy, beginning at ages younger than those at which actual behavioral sex differences emerge (Fagot & Leinbach, 1987). Right in the first week following the birth of their child, parents of daughters describe their infants as more delicate and less strong and as having finer features than do parents of boys (Karraker, Vogel, & Lake, 1995). Adults play more roughly with a male infant, tossing him in the air and tickling him vigorously, than they do with a female infant (Huston, 1983). During infancy and childhood, girls are more likely than boys to be protected and sheltered by adults, whereas boys are given greater opportunities than girls to explore their environments (Block, 1983; Burns, Mitchell, & Obradovich, 1989). When their children are preschoolers, parents react more negatively when their daughters assert themselves than when their sons do. Fathers in particular tend to react positively when their daughters display compliant behavior and to reward their sons for assertiveness (Kerig, Cowan, & Cowan, 1993). In addition, parents give boys more positive evaluations and girls more negative evaluations when children are working on solving problems (Alessandri & Lewis, 1993). Both mothers and fathers use more emotion words when speaking with their preschool-age daughters than with their sons (Adams et al., 1995; Kuebli, Butler, & Fivush, 1995). Parents also respond positively to boys who play with blocks, manipulate objects, and engage in physical play. With girls they encourage play that involves dolls, domestic themes, and "pretending" (Fagot & Leinbach, 1987; Farver & Wimbarti, 1995; Lindsay, Mize, & Pettit, 1997). Fathers appear to be especially concerned about what they perceive as masculinity in their sons, at least during the preschool years (Jacklin, DiPietro, & Maccoby, 1984). Such concern is often expressed in parental interviews, as well as in the consistently negative manner in which fathers respond to sex-atypical behavior in their sons.

However, a meta-analysis of 172 studies of parents' differential socialization of girls and boys suggests that we must be cautious about how much weight we give to the role of direct parental reinforcement in accounting for the various facets of gender-role development. In general, the overall impact of parental behaviors was judged to be small in most areas of socialization, including achievement expectations, dependency, and aggression. The only socialization area that showed a significant effect was parental encouragement of sex-typed activities, such as doll play for girls and tool play for boys (Lytton & Romney, 1991).

There are several ways to interpret these somewhat surprising findings. First, it may be that children's participation in sex-typed play is a particularly important context for acquiring behaviors typical of masculinity and femininity. Recent studies show that children's activity interests and how they spend their leisure time are indeed gender-stereotyped—even more so than their beliefs about gender or their personality characteristics. Boys tend to prefer and engage in activities such as competitive sports and building, whereas girls prefer and participate in activities such as dancing, reading, and writing (McHale, Crouter, & Tucker, 1999, 2001). Even at age three, girls spend more of their weekend time in socializing, personal care activities, and educational activities, whereas boys engage in more video game playing (Huston et al., 1999). Some of these contexts are more conducive to fostering collaboration, whereas others tend to promote competition and assertiveness (Leaper, 2000). Second, children's gender-role socialization may be more heavily influenced by broader social forces than by parental behaviors (Harris, 1995; Martin & Ruble, 1997). For example, peer experiences and exposure to gender-typed media messages may be far more important in gender socialization than the behaviors encouraged by mothers and fathers.

● **Gender Roles in Nontraditional Families** A series of profound changes in the traditional American family over the last several decades has had an impact on gender-role development. As we described in the chapter titled "Emotion," mothers increasingly are employed outside the home while their children are still young. These women may be providing their children with alternative models for feminine behavior.

In general, maternal employment facilitates the development of flexibility in children's conceptions of gender roles. Children with employed mothers are more likely to believe both males and females can exhibit a wide variety of behaviors and personality characteristics than are children whose mothers are not employed outside the home. The effects on daughters of employed mothers are particularly dramatic. Daughters of mothers who work outside the home show higher levels of achievement motivation and are more likely to have personality styles that blend male-typed and female-typed traits than are the daughters of nonworking mothers (Hoffman, 1979; Huston, 1983).

Psychologists are also interested in the effects of nontraditional mothers and fathers—those who take on approximately equal responsibility for child care—on children's gender-role development. Children whose mothers and fathers make a deliberate effort to share parenting are slower to adopt gender labels and show less knowledge of gender stereotypes during the children's preschool years (Fagot & Leinbach, 1995). Research shows that girls in particular profit from the involvement of fathers in child-oriented activities. Elementary school-age girls whose parents were less stereotyped in their marital and child-rearing roles also showed more independence and feelings of being in control over events in their lives (Hoffman & Kloska, 1995). In another research project that included traditional parents, as well as parents who shared equally in child-related responsibilities, adolescent girls from egalitarian families maintained high levels of school achievement, whereas girls from traditional families showed declines in science and mathematics achievement as they made the transition to seventh grade. Boys showed no differences in achievement associated with parenting styles (Updegraff, McHale, & Crouter, 1996).

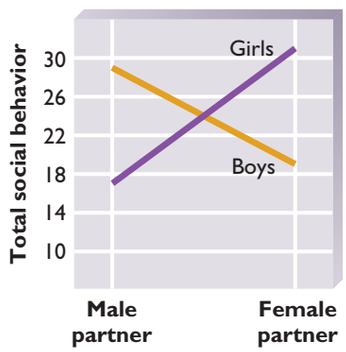
When fathers assume a greater role in parenting, children show less knowledge of stereotypes and are slower to acquire gender labels.

The Influence of Peers

An extremely powerful influence on children's gender-role development is the peer group. Peer groups not only provide children with opportunities for particular kinds of play but also offer a forum in which children can learn about social behavior and social interactions by watching models and obtaining feedback about their own behaviors. Although peers influence children in a variety of social dimensions, nowhere is their impact more marked than in the area of gender-role socialization (Carter, 1987).

● **Early Play Patterns** The role of peers in gender-role development can be observed even among very young children. Carol Jacklin and Eleanor Maccoby (1978) observed same-sex and mixed-sex pairs of unacquainted two-year-olds to determine the influence of peers on toddlers' behavior. Children were dressed in a sex-neutral fashion (in yellow jumpsuits) and allowed to play in a room with their mothers present but nondirective. As Figure 13.5 shows, the toddlers' behavior varied as a function of the sex of their play partner even though the children were unaware of the true sex of the other child. In general, children displayed more social behaviors, both positive overtures and negative acts, when they played with a peer of the same sex. Girls were more likely to be passive when they played with a boy than when they played with a girl. In addition, girls in girl-girl pairs exhibited greater sharing of toys and were less likely to become upset and cry than when they were in mixed-sex pairs. Finally, boys were less likely to obey a verbal prohibition from a girl than from a boy. Already at this young age, the dynamics of peer interactions were markedly affected by the sex of the partners.

● **Peer Enforcement of Gender Roles** Peers continue to exert a strong influence on children's adoption of sex-typical behaviors as they begin preschool. A



Source: Adapted from Jacklin & Maccoby, 1978.

FIGURE 13.5
Social Behavior as a Function of the Child's Play Partner

In a study by Jacklin and Maccoby, unacquainted two-year-olds were observed as they interacted with either a same-sex or an opposite-sex partner. The amount of social behavior (both positive overtures and negative acts such as aggression) was greater when children played with a peer of the same sex.

number of studies have shown, for example, that children respond differentially to sex-typical and sex-atypical behavior in their peers. Children may reward behavior they like by complimenting a child or by engaging in mutual play, and they may punish a behavior they do not approve of by name calling. Preschoolers and kindergartners reliably punish boys who engage in sex-atypical behavior, such as playing with dolls, while rewarding them for engaging in sex-typical behavior, such as playing with trucks (Fagot, 1977; Lamb, Easterbrooks, & Holden, 1980; Lamb & Roopnarine, 1979). In contrast, girls are rewarded for engaging in sex-typical behavior, such as playing house, but apparently they experience no consequences when they engage in sex-atypical behavior (Fagot, 1977).

The pressures the peer group exerts apparently work. Children are responsive to the positive and negative feedback they receive from their peers. They are likely to continue to engage in a sex-typical behavior in response to reinforcement and to terminate behaviors their peers punish (Lamb et al., 1980). Furthermore, feedback from same-sex peers is especially important. Beverly Fagot (1978a) found that both girls and boys two years of age were more likely to continue a behavior if a same-sex peer responded positively and to discontinue a behavior if a same-sex peer reacted negatively. If the peer was of the other sex, however, the peer's feedback was largely ineffective.

● **Cross-Gender Behavior** Some children (between 20 and 40 percent), more often girls than boys, fail to respond to their peers' disapproval of sex-atypical behavior (Sandberg et al., 1993). These children exhibit **cross-gender behavior;** that is, they adopt, in whole or in part, a variety of characteristics typical of the other sex (Fagot, 1977). Cross-gender boys, for example, exhibit a strong interest in feminine games and activities and play "dress-up" in girls' clothes. Cross-gender boys are likely to become social isolates over time because their male peers refuse to interact with them even when they play in a masculine fashion, and their female peers seem to merely tolerate their presence. Cross-gender girls, in contrast, appear to suffer very little for their sex-atypical behavior, at least in the preschool years.

KEY THEME
Sociocultural Influence

The tendency of children to disapprove of cross-gender behavior is more pronounced in cultures that emphasize the importance of traditions and adhering to social norms (e.g., Taiwan) as opposed to freedom to break from traditions and individualism (e.g., Israel) (Lobel et al., 2001). This tendency also increases with age. When researchers interviewed kindergartners through sixth-graders to determine how these children would respond to hypothetical cases of cross-gender behavior in their peers, older children reported they would respond more negatively to cross-

Both boys and girls may engage in cross-gender activities. However, it is usually easier for girls to cross gender boundaries than for boys; peers usually react more negatively in the latter case.

cross-gender behavior Behavior usually seen in a member of the opposite sex. Term generally is reserved for behavior that is persistently sex atypical.

gender behavior than did younger children. Moreover, children stated they would respond more negatively to cross-gender behavior in their male peers than in their female peers. The degree of negativity children exhibited was particularly surprising. Children were virtually unanimous in their assertion that they would not want to play with a cross-gender child. Children's reports of how they would respond ranged from fairly innocuous comments (such as "I'd stay away") to statements indicating they would physically abuse cross-gender children (Carter & McCloskey, 1984).

Similar results were obtained when researchers asked preadolescents to describe the personal qualities of an actor who played a gender-inappropriate game with children of the opposite sex. If a boy actor played jumprope with a group of girls, he was viewed as significantly less popular than a female actor or a male actor playing a masculine game (Lobel et al., 1993). As we will see in the chapter titled "Peers," popularity with peers is, in turn, associated with other significant developmental outcomes. Children who are unpopular often have low self-esteem and poor academic achievement and may be prone to aggression. Thus cross-gender behavior can be stigmatizing and potentially far-reaching in its effects.

KEY THEME
Interaction Among Domains

CONTROVERSY: THINKING IT OVER

Is Gender Identity Disorder Really a Disorder?

According to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) of the American Psychiatric Association (1994), cross-gender children may qualify for a diagnosis of *gender identity disorder* if they express a strong desire to be a member of the opposite sex or claim to be unhappy as a boy or a girl (American Psychiatric Association, 1994). Children may insist on wearing clothing or hairstyles of the opposite sex or may display significant problems at home or school, sometimes to the extent that parents seek out professional help (Zucker & Bradley, 2000).

What Is the Controversy?

The main point of contention is whether gender identity disorder is a genuine psychiatric problem residing within an individual or whether the problem lies in our broader society's intolerance for behaviors that violate gender boundaries. When these children experience distress, for example, is it because of some inner turmoil associated with personal adjustment issues or is it due to the highly negative reactions of peers and parents to cross-gender behaviors?

What Are the Opposing Arguments?

The criteria for mental disorder in the DSM-IV include an individual's experience of severe distress or increased risk of harm. Mental health professionals note that children with gender identity disorder are prone to depression and behavior problems similar to those of children with other clinical diagnoses (Zucker & Bradley, 2000). Therefore, some say that gender identity disorder is a legitimate psychiatric problem. Critics point out that gender identity disorder does not necessarily lead to adjustment problems later in adolescence and adulthood. Many of these children, for example, eventually identify themselves as homosexual, which is not a psychiatric condition in DSM-IV. Moreover, the distress children experience is not due to cross-gender behaviors—these children are perfectly happy when they perform such behaviors. It is the reactions of peers and others that cause them such great difficulty. The critics believe that gender identity disorder should be removed from DSM-IV (Bartlett, Vasey, & Bukowski, 2000).

What Answers Exist? What Questions Remain?

Research has shown that the degree to which children view themselves as compatible with their gender is indeed related to psychological adjustment. Preadolescents who express contentment with their own gender and see themselves as typical for their

sex have higher self-esteem, for example (Egan & Perry, 2001). Thus "fitting in" with one's gender is associated with indicators of mental health.

However, when children with gender identity disorder report distress, the cause is usually problems with peers or unhappiness at having to stop their cross-gender behaviors, not a disturbance of gender. Also important to consider is the fact that definitions of masculinity and femininity can vary across cultures and historical times. Nancy Bartlett and her colleagues point out that in other eras, for example, men who stayed at home with their children might have been seen as mentally ill for violating a gender norm (Bartlett et al., 2000).

Perhaps it would be helpful to conduct more longitudinal studies of cross-gender children to observe developmental changes in their adjustment, as well as the specific antecedents and consequences of their cross-gender behaviors. What other kinds of studies might be useful in sorting out the issues relevant to considering whether gender identity disorder is really a disorder?

● **Sex Segregation** The influence of peers on sex typing in children's behavior is undoubtedly enhanced by the fact that boys and girls tend to interact in separate groups: starting at age three or four, boys play with boys and girls play with girls (Maccoby, 1988, 1990). This phenomenon is called **sex segregation.** In one observation of one hundred children on their preschool playgrounds, four-year-olds spent three times as much time with same-sex partners as with opposite-sex partners. By age six, they spent eleven times more time with peers of the same sex (Maccoby & Jacklin, 1987). In fact, only about 10 percent of young children's peer interactions are with members of the opposite sex (Martin & Fabes, 2001). This tendency to prefer same-sex peers persists at least until early adolescence (Maccoby, 1990). Interestingly enough, when young children are asked if a boy can join a group of girls playing with dolls (or if a girl can join a group of boys playing with trucks), almost 90 percent say "Yes" and justify their responses on moral grounds. It wouldn't be right or fair, they say, to exclude the member of the opposite sex (Killen et al., 2001). Yet when confronted with social interactions with an opposite-sex peer, elementary–school age children express more negative emotion toward and less liking of that child (Underwood, Schockner, & Hurley, 2001). Sex segregation is a potent phenomenon in the social lives of young children.

Eleanor Maccoby (1990, 2002) believes children's experiences in same-sex groups constitute an extremely powerful socialization environment. As boys play in their characteristic rough-and-tumble fashion or in team sports and games, they develop assertive, dominance-seeking styles of interaction. In contrast, girls' groups, which are oriented toward relationships and shared intimacy, promote cooperation and mutual support, as well as a tendency to preserve the cohesiveness of the group. A recent study of preschool and kindergarten children over a six-month period confirmed that as children spent more time in same-sex groups, their conformity with gender-stereotyped behaviors increased. Boys who spent more time with boys became more active and rough in their play. Similarly, girls who spent more time with girls played more calmly over time and engaged in more gender-stereotyped play, such as dressing up and interacting with dolls (Martin & Fabes, 2001).

Sex segregation begins to break down as children enter adolescence and begin to think about dating (Richards et al., 1998). The pressures of heterosexual interactions, however, may enhance rather than diminish the push toward conformity with gender-role norms (Eccles, 1987; Petersen, 1980). This pattern is particularly obvious among teenage girls, many of whom abandon "tomboyish" behaviors that were acceptable during an earlier period of development (Huston & Alvarez, 1990).

sex segregation Clustering of individuals into same-sex groups.

● **Adolescent Peer Influences** Peer acceptance and rejection become increasingly important during adolescence. Although sex-typing pressures remain high, popularity among adolescents of both sexes relies more on positive personality characteristics, such as leadership abilities and politeness, than on merely the presence of

sex-typed behavior (Sigelman, Carr, & Begley, 1986). Thus the presence of cross-gender personality characteristics or behaviors may not lead to isolation from peers among older adolescents to the extent that it does for younger children (Huston & Alvarez, 1990; Katz & Ksansnak, 1994). Adolescents' greater tolerance for sex-atypical personality characteristics probably reflects their increasing cognitive abilities, specifically their ability to consider multiple dimensions as they make judgments about individuals, including abstract qualities such as trustworthiness or loyalty (Eccles, 1987).

KEY THEME
Interaction Among Domains

The Influence of Teachers and Schools

Teachers, like peers and parents, treat children differentially according to sex, reinforce and punish sex-typed behaviors, and model sex-typical behavior for their students. Moreover, schools may foster sex typing through the teaching materials and curriculum to which children are exposed. For example, one survey of children's readers found that although boys and girls were portrayed with almost equal frequency, girls were more often the characters in stories in need of rescue and boys were rarely shown doing housework or displaying emotions (Purcell & Stewart, 1990).

● **Teacher Attitudes and Behaviors** Teachers, like other adults, may express stereotypical, gender-based views about the capacities of their students. They believe female students are feminine and male students are masculine, although more experienced teachers are less likely to hold stereotyped beliefs and more likely to treat students in an egalitarian fashion than are less experienced teachers (Fagot, 1978a; Huston, 1983). When teachers are asked to nominate their best students or those with the most potential, they are more likely to nominate boys than girls. They are especially likely to name boys as most skilled in mathematics. When asked to think of students who excel in language or social skill, teachers are more likely to name girls (BenTsvi-Mayer, Hertz-Lazarowitz, & Safir, 1989). These patterns in teacher responses occur despite the fact that actual sex differences in many of these domains are minimal.

In addition, teachers respond differently to students on the basis of sex as opposed to behavior. Boys, for example, receive more disapproval from teachers than girls do during preschool and elementary school, even when boys and girls engage in similar amounts of disruptive behavior (Huston, 1983; Serbin et al., 1973). Teachers' behavior may reflect a belief that boys are more likely than girls to cause trouble in the classroom unless rules are strictly enforced (Huston, 1983). On the other hand, teachers pay more attention to a girl when she sits quietly in the front of the classroom, whereas the amount of attention paid to a boy is high regardless of where he sits (Serbin et al., 1973). Within elementary school classrooms, teachers tend to call on boys more often than girls and give them more explicit feedback regarding their answers. When girls answer, they are more likely to receive a simple acceptance from the teacher ("okay"), whereas boys tend to receive more praise, constructive criticism, or encouragement to discover the correct answer (Sadker & Sadker, 1994). Thus boys receive more explicit academic instruction and tend to dominate classroom interactions.

Teachers can influence the degree to which children pay attention to stereotypes when they highlight gender as a relevant social grouping. In one study, teachers in one set of classrooms were told to behave in ways that emphasized gender groups. For example, they used separate bulletin boards to display girls' and boys' artwork and made frequent comments such as, "All the boys should be sitting down" or "Amber, you can come up for the girls." Teachers in this group made an average of 7.2 references to gender per twenty-minute time period. Compared with a control group in which teachers were instructed to refer to children as individuals rather than according to gender, children in the "gendered" classrooms showed significant increases in stereotyping over the course of four weeks (Bigler, 1995).

Research has shown that boys typically receive more attention from teachers than girls. Teachers can promote sex equity in the classroom by deliberately calling on girls to answer questions and by waiting a few moments to give girls a chance to participate.

Research Applied to Education

Promoting Gender Equity in the Classroom

Now eight years old, Nicky is sitting in a circle with the other third-graders in his class, listening to Brittany read the story she wrote during Writing Workshop. The children seem captivated by her story; even the most restless among them sits quietly, eyes glued on the storyteller. When Brittany is done, Ms. Klein says, "Okay, does anyone have any questions or comments about Brittany's story? Go ahead, Brittany. You can call on someone." Hands fly up eagerly.

"Stephen," says Brittany.

"Why did you make the character live by a pond?" asks Stephen.

"Because he has a lot of animal friends that live there," she responds.

More hands churn in the air. "Nicky," she calls out next. "Wait a minute," says Ms. Klein. "Remember our rule. You have to call on a girl next."

"Reesha," Brittany calls out.

"I like how the words you picked make me think of beautiful pictures in my head," comments Reesha. "Thank you," responds Brittany, a little shyly.

Nicky's mother, observing all of this, thinks maybe her son feels slighted for being passed over. Later, when she asks him about this, he firmly proclaims, "All Ms. Klein is trying to do is to be fair to the boys and girls in the class. I didn't feel bad at all. I think it's the right thing to do."

Just as teacher behavior can perpetuate stereotypes, it can change sex-typing patterns among children in classroom settings. A collection of studies suggests some specific techniques teachers can use to reduce sex segregation, modify children's beliefs about gender, and promote the participation of girls in the classroom.

1. *Use reinforcement to facilitate cooperative cross-sex play.* In one study involving preschoolers and kindergartners, teachers praised children who played in mixed-

sex groups by pointing out their cooperative play to the class and complimenting the children. Cross-sex play subsequently increased (Serbin, Connor, & Iler, 1979; Serbin, Tonick, & Sternglanz, 1977).

2. *Prepare lessons that explicitly allow children to question gender stereotypes about personal qualities, occupations, and activities.* Researchers in Dublin, Ireland, had student teachers present a series of lessons to children in the first through sixth grades. The lessons encouraged children to think of counterexamples to common stereotypes, for example, instances in which women show an interest in football or in which men have been observed to be warm and gentle. Discussions were supplemented by opportunities to meet people who worked in nontraditional roles, such as a male nurse and a female veterinary surgeon. In addition, children read poetry, read fairy tales, and had worksheets that brought up themes counter to traditional stereotypes. At the end of four months, children who had experienced the lessons had significantly lower stereotype scores than those in a control group (Gash & Morgan, 1993).

3. *Be conscious of the need to give girls a chance to participate.* One way to do this is to wait three to five seconds before calling on a student to answer a question. Girls, especially those who are shy or less confident, may need time to formulate their answers and decide they are willing to share them with the class. Also, do not just call on students who volunteer, because these are more likely to be boys. Teachers can even have an observer record the number of times they call on boys versus girls. Myra and David Sadker (1994) found that when teachers saw the results of such observations, and, further, when they received training on how to be more gender equitable, girls in their elementary and secondary school classrooms became more equal partners with boys in class participation.

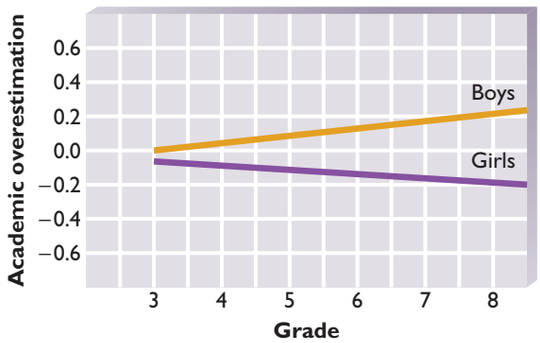
● **Student Attitudes Toward Coursework** For several decades, research has indicated that students, teachers, and parents alike view some academic subjects as masculine and others as feminine (Huston, 1983). As we noted earlier, mathematics has generally been seen as a masculine activity and reading as feminine (Eccles, 1983; Eccles, Wigfield, et al., 1993; Huston, 1983; Yee & Eccles, 1988). Such sex typing has not been limited to American schoolchildren. In a study of first- through fifth-grade Chinese, Japanese, and American boys and girls, the investigators found that most children believed boys are better in mathematics and girls are better at reading (Lummis & Stevenson, 1990). Moreover, boys in these three societies predicted they would do better in mathematics in high school than girls predicted they would do, although no sex differences were found in children's predictions of their future reading skills.

Society's messages about girls' mathematical abilities may be changing, however. In a recent study including data from children in first through twelfth grades, researchers asked children to report how competent they felt in math. Although in the early grades boys clearly felt more capable in math than girls, the gender gap in beliefs declined with age such that by twelfth grade there was virtually no difference between boys and girls. The researchers suggest that one reason for this shift may be a general societal push for girls to participate in math courses and activities (Fredricks & Eccles, 2002).

● **Sex Differences in Academic Self-evaluations** Girls generally show greater self-criticism of their academic work than boys do. Karin Frey and Diane Ruble (1987) have studied instances of self- and peer criticism for academic work in classroom settings. Children between ages five and ten years were observed at work in academic tasks in their classrooms, and their spontaneous critical and complimentary comments about themselves and their peers were tallied. Several sex differences emerged in the nature of comments children made. Overall, both girls and boys made more self-compliments than self-criticisms, but boys made a greater number

FIGURE 13.6
Gender Differences in Academic Self-evaluations

In a study by Cole et al. (1999), third- and sixth-graders were asked to evaluate their scholastic competence each year for a period of three years. Teachers also evaluated children's academic abilities. The graph shows that there are sex differences in children's tendency to overestimate their academic abilities starting at about fourth grade and continuing through eighth grade. (The y-axis shows a statistical estimate of the tendency to overestimate such that a higher positive number indicates greater overestimation.)



Source: Cole et al., 1999.

of self-congratulatory statements relative to self-criticisms than girls did. Boys complimented themselves and criticized their peers more than girls did, whereas girls criticized themselves and complimented their peers more than boys did. Girls also were more likely to attribute their failures to a lack of ability ("I'm so stupid") than boys were. If girls tend to take greater responsibility for their own failures than boys do, it is possible that there may be emotional consequences for them, for example, greater anxiety and depression.

The link between emotions and academic self-evaluations was demonstrated in a recent longitudinal study in which third- and sixth-graders were asked to evaluate their scholastic competence each year for a period of three years. Teachers also evaluated children's academic abilities. Boys and girls were similar in their estimates of their academic ability in grade three, but in successive years, their profiles diverged. As Figure 13.6 illustrates, starting at about fourth grade and continuing through eighth grade, boys tended to overestimate their academic abilities and girls tended to underestimate theirs. In addition, symptoms of anxiety and depression were negatively correlated with the tendency to overestimate one's abilities (Cole et al., 1999). Thus gender differences in self-evaluations can have important connections to children's emotional well-being.

The preceding findings should be a concern in light of the findings of a recent cross-cultural study that found that in settings as diverse as Japan, Germany, and Russia, girls who outperformed boys on academic measures did not see themselves as more talented than boys (Stetsenko et al., 2000). Just why talented girls tend to underplay their abilities and the repercussions of this tendency are key questions for developmental researchers.

WHAT DO YOU THINK?

Are Single-Sex Schools Better Than Coed Schools?
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FOR YOUR REVIEW

- What are some indirect and direct ways in which parents influence children's gender-role development?
- What effects do nontraditional parents have on gender-role development?
- What do early play patterns reveal about the role of peers in gender-role development?
- What role do peers play in the enforcement of sex-typed behaviors?
- What are the consequences of cross-gender behaviors for boys and for girls?
- How does sex segregation contribute to the development of gender roles?
- In what ways do teachers sometimes contribute to sex-typed behaviors in children?
- In what specific ways can teachers promote gender equity in classrooms?
- What attitudes do boys and girls hold about academic subjects and academic self-evaluations?

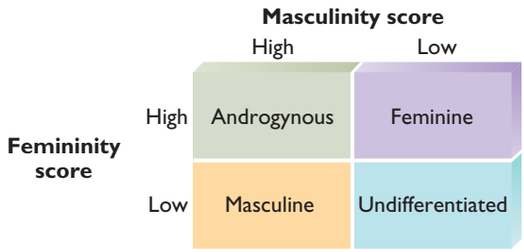

FIGURE 13.7
Classification of Sex Typing

In Sandra Bem's (1974, 1975) classification scheme, individuals who score high on traits associated with both masculinity and femininity are classified as "androgynous"; those scoring low on both dimensions are classified as "undifferentiated." "Feminine" and "masculine" individuals are those who score high on one sex-typing dimension and low on the other.

Alternative Conceptualizations of Gender

Changes in society's conceptions of the desirability of traditional sex typing have been reflected in changes in psychological theories. Conceptions of gender-role development have taken two relatively new directions. Rather than assuming that traditional masculine and feminine roles are the most desirable, some psychologists have suggested that blending both sets of traits may expand our ability to respond adaptively to the demands of our environments. Others maintain that male and female development differ, but in ways that can be valued and embraced.

Androgyny

Traditionally, psychologists treated masculinity and femininity as opposite ends of a bipolar dimension: by definition, the more masculine one was, the less feminine one could be. Sandra Bem (1974, 1975) challenged this view by proposing that masculinity and femininity are not mutually exclusive, as the bipolar formulation would suggest, but are separate, measurable dimensions of personality. Thus a person of either sex could be assertive in situations in which that behavior was necessary and nurturant when nurturance was required. From Bem's perspective, **androgyny,** the coexistence of both masculine and feminine characteristics, allows the individual to be maximally adaptive.

Psychological androgyny should not be confused with the ways the popular media present androgyny. From a psychological perspective, people whose physical appearance is ambiguous, neither distinctively male nor distinctively female, are not necessarily androgynous. In Bem's formulation, *androgynous* people are those who exhibit high levels of both masculine and feminine personality characteristics. People who are highly masculine and possess fewer feminine characteristics are designated as *masculine,* whereas those who are highly feminine and possess fewer masculine characteristics are designated as *feminine*. People who have few masculine and feminine characteristics are classified as *undifferentiated*. Figure 13.7 presents this classification scheme.

Psychological health and popularity with peers have been found to be associated with androgyny. For example, androgynous adolescents are better adjusted psychologically than are sex-typed or undifferentiated people (Ziegler, Dusek, & Carter, 1984). Similarly, androgynous adolescents are liked better by their peers and report feeling less lonely than other groups of adolescents (Avery, 1982; Massad, 1981). Androgynous adolescents also are more likely to have resolved identity crises than are nonandrogynous adolescents (Dusek, 1987). Finally, androgynous girls are more likely to attribute success to internal factors, such as their own efforts or hard work, than to external factors, such as chance or the influences of others (Huston, 1983).

How does an individual become androgynous? One possibility involves the child's growing ability to conceptualize the self and social roles in complex, abstract terms. Eccles (1987) has proposed that children cannot become androgynous before adolescence because they are still in the process of acquiring a gender role. During adolescence, however, children's abilities to conceptualize sex roles in a more

KEY THEME
Interaction Among Domains

androgyny Gender-role orientation in which a person possesses high levels of personality characteristics associated with both sexes.

abstract manner lead them to view gender-role stereotypes as descriptive statements about regularities in behavior rather than as prescriptions for acceptable behavior. Simultaneously, as adolescents strive to define their identities, they may consider factors other than gender as a means of characterizing themselves. Though androgynous role models are likely to foster gender-role transcendence, according to Eccles (1987), the convergence of cognitive developmental changes and the emergence of self-definition, rather than external factors such as models, allow children to transcend traditional roles and emerge as androgynous.

The Relational Approach

Instead of emphasizing the blending of male and female traits, some theorists maintain that the development of females is unique and different from the development of males. For example, in the chapter titled "Self and Values," we saw how Carol Gilligan (1982) defined a "morality of care and responsibility" for females, a distinctive orientation toward relationships that characterizes responses of females to moral dilemmas, in contrast to the "morality of justice" that typifies male responses. Similarly, Jean Baker Miller (1986) maintains that a central feature of female development, largely ignored by mainstream developmental psychology, is the tendency to seek out and maintain relationships with others. This tendency represents a marked departure from the widely held notion that child development is, in large part, the process of becoming independent, autonomous, and self-reliant. For females, development may mean more, not less, connection with others. Further, instead of characterizing these tendencies of females as "dependency," a term that has negative connotations, theorists of the relational school believe they are an important source of gratification and self-fulfillment (Miller, 1991; Surrey, 1991).

This framework opens up new interpretations for certain important developmental time periods. For example, adolescence has traditionally been seen as a phase in which children desire to separate from their parents, to realize their own potentials and strike out on their own. For females, however, breaking away from parents may not be the goal. Instead, the adolescent girl may wish to change the form of her relationships but still maintain them (Surrey, 1991). The dilemma of reconciling her inclinations toward relationship with her knowledge that the larger society expects her to "break away" may lead to intense conflicts for the adolescent female (Gilligan, Lyons, & Hanmer, 1990). Young girls who were at one time outspoken may become reluctant to verbalize their feelings; they may lose confidence in themselves, and their relationships with other females may suffer (Brown & Gilligan, 1992).

Researchers have begun to find other support for the idea that female development is distinct from male development in that it revolves around establishing and maintaining relationships with others. For example, in one study in which children were asked to talk about past events in their lives, eight-year-old girls mentioned more details about the social context and their relationships with other people than did boys (Buckner & Fivush, 1998). In another study, high self-esteem in female adolescents was positively correlated with a strong desire to help female friends, that is, to feel connected with them. In contrast, high self-esteem in male adolescents was related to assertiveness with male friends, that is, wanting to stand apart and get ahead of them (Thorne & Michaelieu, 1996). Finally, other research has shown that girls in the eighth and tenth grades were more likely than boys to agree with questionnaire items such as "When making a decision, I take other people's needs and feelings into account." That is, they endorsed items that contained an orientation toward relationships (Jones & Costin, 1995).

KEY THEME
Nature/Nurture

Parental socialization of girls may lead them to an orientation toward relationships. When mothers of preschoolers were observed conversing with their daughters, they spent more time than mothers of boys discussing their children's shared activities—that is, their relationships with others; mothers of boys tended to discuss compar-

According to the relational approach, girls' development is distinct from that of boys, revolving around the need to establish and maintain relationships with others. Rather than breaking away from parents during adolescence, for example, girls may desire to keep their connections with them.

isons of their children with peers more than mothers of girls did (Flannagan & Hardee, 1994). Some researchers argue that without additional empirical evidence, it is premature to conclude that males and females differ in their essential nature (Martin & Ruble, 1997). Nonetheless, the relational perspective has revealed important details about the nature of female development that had previously been overlooked.

FOR YOUR REVIEW

- What are the characteristics of individuals who are psychologically androgynous? What psychological benefits often accompany androgyny?
- How does the relational approach conceptualize gender-role development? What research findings are consistent with the relational point of view?

CHAPTER RECAP

Summary of Developmental Themes

Nature/Nurture ***What roles do nature and nurture play in gender development?***

According to some theorists, biological influences such as hormones and brain lateralization underlie sex differences in aggression and visual-spatial skill, and some experimental evidence is indeed consistent with such hypotheses. According to social learning theorists, the child's socialization experiences with parents and peers and in school contribute substantially to observed sex differences, as does the child's knowledge of gender-role stereotypes. Research shows that peers and teachers, and to some extent parents, treat boys and girls differently, providing support for the nurture position.

Sociocultural Influence ***How does the sociocultural context influence gender development?***

Most cultures hold stereotypical beliefs about gender roles, although the specific characteristics associated with each sex can vary. The particular behaviors exhibited by males and females can also vary according to culture. Such findings demonstrate that although the tendency to stereotype is widespread, the characteristics associated with each sex are not necessarily fixed. Changes within American society, such as the increased proportion of women employed outside the home, underscore the idea that children's gender-role development can be affected by shifting sociocultural trends.

■ **Child's Active Role** ***How does the child play an active role in the process of gender development?***

The child's active role in the construction of gender-based knowledge is emphasized in cognitive-developmental theories of gender development. For example, many children construct gender schemas based on their socialization experiences, schemas that in turn influence how they process gender-related information and how they themselves behave.

■ **Continuity/Discontinuity** ***Is gender development continuous or discontinuous?***

Theorists such as Lawrence Kohlberg describe gender development as a stagelike process. Kohlberg hypothesized that children progress through a sequence of attaining gender identity, gender stability, and gender constancy. In contrast, social learning theorists describe the cumulative and incremental effects of reinforcement and modeling on gender-role development. Research has confirmed that children pass through the general sequence of gender awareness outlined by Kohlberg, but has also provided support for social learning theory.

■ **Individual Differences** ***How prominent are individual differences in gender development?***

Some children acquire gender identity earlier than others; these children tend to behave in more sex-typed ways and have greater knowledge of gender stereotypes than children who acquire gender identity later in life. Later in childhood, some children tend to be gender schematic; that is, they tend to organize their world along sex-divided lines. These children may even distort information to make it consistent with their strong gender schemas. Finally, some children exhibit patterns of cross-gender behavior. These tendencies are usually met with negative feedback from peers, especially if the cross-gender child is a boy.

■ **Interaction Among Domains** ***How does gender development interact with development in other domains?***

Attainments in cognition are thought to be related to many aspects of gender-role development. Bandura describes cognitive processes, such as attention, that influence which models, male or female, children will imitate. Kohlberg suggests that general cognitive advances pave the way for gender knowledge, such as gender constancy. By the same token, the child's state of gender-role development can influence cognitive processing. Gender-schematic children, for example, may show memory distortions consistent with their gender-role beliefs.

Summary of Topics

Gender Stereotypes Versus Actual Sex Differences

- *Gender stereotypes* are the expectations or beliefs that individuals within a given culture hold about the behaviors characteristic of women and men. Children learn these stereotypes as part of the process of *gender-role development*.

The Stereotypes: What Are They?

- Stereotypes of masculinity center on *instrumentality*, qualities associated with acting on the world. Stereotypes of femininity center on *expressiveness*, qualities associated with emotions and relationships.
- Although there are many cross-cultural similarities in the content of gender stereotypes, there are also notable variations.

Children's Knowledge of Gender Stereotypes

- Children demonstrate knowledge of gender stereotypes as early as age two.
- With development, knowledge about stereotypes becomes more extensive but also more flexible.

What Sex Differences Actually Exist?

- Males and females differ in several physical qualities, including activity level, rate of maturity, and physical size.
- The most notable sex differences in cognition are in visual-spatial tasks. Males tend to perform better than females on tasks that require mental rotation and spatial perception.
- A consistent finding in the domain of social behaviors is that males are more aggressive than females, although definitions of aggression, context, and age all make a difference in how this quality is expressed.
- Girls show a heightened sensitivity to emotions and are more vulnerable than boys to depression.

Sex Differences in Perspective

- Actual sex differences are fewer than the stereotypes suggest, but the stereotypes persist because of basic ways in which humans process social information.

Theories of Gender-Role Development

Biological Theories

- Biological theories emphasize the role of hormones such as *androgens* and differences in the structures of male and female brains in explaining sex differences in behaviors such as aggression and visual-spatial skills.
- Although research evidence provides support for biological theories of sex differences, cautions are in order because of the complex and bidirectional ways in which biology and environment interact.

Social Learning Theory

- Social learning theory emphasizes the roles of reinforcement, imitation, and, eventually, self-regulation in producing sex-typed behaviors.
- An important factor influencing the likelihood of imitation is the *sex typicality* of the model's behavior.
- Variations in sex-typed behaviors across cultures suggest a role for socialization experiences.

Cognitive-Developmental Theories

- Kohlberg's theory hypothesizes that children's awareness of gender grows through successive notions of *gender identity*, *gender stability*, and *gender constancy*.
- Gender identity is usually formed by age three, an accomplishment that is linked to sex-typed preferences in play activities and knowledge of stereotypes.
- *Gender schema* theory states that children first form schemas of same-sex–opposite-sex and then form more elaborate schemas for their own sex.
- Some children rely more on gender schemas than others as they process social information, a tendency that often leads them to distort information about sex-atypical behaviors.

The Socialization of Gender Roles

The Influence of Parents

- From the birth of a child onward, many parents express stereotypical attitudes and beliefs about their male and female children. They also treat children differently based on their biological sex, especially in the kinds of activities and play they encourage in children.
- Children who have nontraditional parents show less knowledge of gender stereotypes, and girls show more independence and achievement.

The Influence of Peers

- Children show early preferences for same-sex peer groups, and peers are ardent enforcers of gender-role norms.
- Children who consistently display cross-gender behaviors are likely to be isolated from their peer groups.
- *Sex segregation* is a robust phenomenon through the early school years and provides differential socialization experiences for boys and girls.

The Influence of Teachers and Schools

- Teachers may contribute to gender-role socialization through their attitudes and behaviors. Teachers may have different expectations about the academic skills of boys and girls and often focus more attention on boys than on girls.
- Students' own beliefs about their academic skills may be sex typed, but at least in the domain of mathematics, girls' beliefs in their competence seem to be increasing.
- Girls often underestimate their academic abilities and attribute failures to lack of ability.

Alternative Conceptualizations of Gender

Androgyny

- Androgyny refers to a gender-role orientation in which the individual possesses many qualities associated with both masculinity and femininity.
- Androgyny has been found to be associated with psychological health.

The Relational Approach

- The relational approach attempts to define the elements of female development that are unique compared with those of male development.