

Module 48

Infancy and Childhood: Social Development

Module Learning Objectives

- 48-1** Describe how parent-infant attachment bonds form.
- 48-2** Describe how psychologists study attachment differences, and discuss their findings about the effect of temperament and parenting.
- 48-3** Discuss how childhood neglect, abuse, or family disruption affect children's attachments.
- 48-4** Discuss the effect of day care on children.
- 48-5** Trace the onset and development of children's self-concept.
- 48-6** Describe three parenting styles, and explain how children's traits relate to them.



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48-1 How do parent-infant attachment bonds form?

From birth, babies in all cultures are social creatures, developing an intense bond with their caregivers. Infants come to prefer familiar faces and voices, then to coo and gurgle when given a parent's attention. At about 8 months, soon after object permanence emerges and children become mobile, a curious thing happens: They develop **stranger anxiety**. They may greet strangers by crying and self-protectively reaching for familiar caregivers. "No! Don't leave me!" their distress seems to say. Children this age have schemas for familiar faces; when they cannot assimilate the new face into these remembered schemas, they become distressed (Kagan, 1984). Once again, we see an important principle: *The brain, mind, and social-emotional behavior develop together*.

stranger anxiety the fear of strangers that infants commonly display, beginning by about 8 months of age.

attachment an emotional tie with another person; shown in young children by their seeking closeness to the caregiver and showing distress on separation.

Origins of Attachment

One-year-olds typically cling tightly to a parent when they are frightened or expect separation. Reunited after being apart, they shower the parent with smiles and hugs. No social behavior is more striking than the intense and mutual infant-parent bond. This **attachment** bond is a powerful survival impulse that keeps infants close to their caregivers. Infants become attached to those—typically their parents—who are comfortable and familiar. For many years, psychologists reasoned that infants became attached to those who satisfied their need for nourishment. It made sense. But an accidental finding overturned this explanation.

Body Contact

During the 1950s, University of Wisconsin psychologists Harry Harlow and Margaret Harlow bred monkeys for their learning studies. To equalize experiences and to isolate any disease, they separated the infant monkeys from their mothers shortly after birth and raised them in sanitary individual cages, which included a cheesecloth baby blanket (Harlow et al., 1971). Then came a surprise: When their blankets were taken to be laundered, the monkeys became distressed.

The Harlows recognized that this intense attachment to the blanket contradicted the idea that attachment derives from an association with nourishment. But how could they show this more convincingly? To pit the drawing power of a food source against the contact comfort of the blanket, they created two artificial mothers. One was a bare wire cylinder with a wooden head and an attached feeding bottle, the other cylinder wrapped with terry cloth.

When raised with both, the monkeys overwhelmingly preferred the comfy cloth mother (**FIGURE 48.1**). Like other infants clinging to their live mothers, the monkey babies would cling to their cloth mothers when anxious. When exploring their environment, they used her as a *secure base*, as if attached to her by an invisible elastic band that stretched only so far before pulling them back. Researchers soon learned that other qualities—rocking, warmth, and feeding—made the cloth mother even more appealing.

Human infants, too, become attached to parents who are soft and warm and who rock, feed, and pat. Much parent-infant emotional communication occurs via touch (Hertenstein et al., 2006), which can be either soothing (snuggles) or arousing (tickles). Human attachment also consists of one person providing another with a secure base from which to explore and a safe haven when distressed. As we mature, our secure base and safe haven shift—from parents to peers and partners (Cassidy & Shaver, 1999). But at all ages we are social creatures. We gain strength when someone offers, by words and actions, a safe haven: “I will be here. I am interested in you. Come what may, I will support you” (Crowell & Waters, 1994).

Familiarity

Contact is one key to attachment. Another is familiarity. In many animals, attachments based on familiarity form during a **critical period**—an optimal period when certain events must take place to facilitate proper development (Bornstein, 1989). For goslings, ducklings, or chicks, that period falls in the hours shortly after hatching, when the first moving object they see is normally their mother. From then on, the young fowl follow her, and her alone.

Konrad Lorenz (1937) explored this rigid attachment process, called **imprinting**. He wondered: What would ducklings do if he was the first moving creature they observed? What they did was follow him around: Everywhere that Konrad went, the ducks were sure to go. Although baby birds imprint best to their own species, they also will imprint to a variety of moving objects—an animal of another species, a box on wheels, a bouncing ball (Colombo, 1982; Johnson, 1992). Once formed, this attachment is difficult to reverse.



Figure 48.1

The Harlows' monkey mothers

Psychologists Harry Harlow and Margaret Harlow raised monkeys with two artificial mothers—one a bare wire cylinder with a wooden head and an attached feeding bottle, the other a cylinder with no bottle but covered with foam rubber and wrapped with terry cloth. The Harlows' discovery surprised many psychologists: The infants much preferred contact with the comfortable cloth mother, even while feeding from the nourishing mother.

Harlow Primate Laboratory

FYI

For some people, a perceived relationship with God functions as do other attachments, by providing a secure base for exploration and a safe haven when threatened (Granqvist et al., 2010; Kirkpatrick, 1999).

critical period an optimal period early in the life of an organism when exposure to certain stimuli or experiences produces normal development.

imprinting the process by which certain animals form strong attachments during an early-life critical period.

Imprinting Whooping cranes normally learn to migrate by following their parents. These cranes, hand-raised from eggs, have imprinted on a crane-costumed ultralight pilot, who then guided them to winter nesting grounds (Mooallem, 2009).



Mark Peterson/Redux

Children—unlike ducklings—do not imprint. However, they do become attached, during a less precisely defined *sensitive period*, to what they've known. *Mere exposure* to people and things fosters fondness (see Module 79). Children like to reread the same books, rewatch the same movies, reenact family traditions. They prefer to eat familiar foods, live in the same familiar neighborhood, attend school with the same old friends. You may even have noticed your own preference for familiar music, familiar daily routines, and familiar class seating locations. Familiarity is a safety signal. Familiarity breeds content.

Attachment Differences: Temperament and Parenting

48-2 How have psychologists studied attachment differences, and what have they learned about the effects of temperament and parenting?

What accounts for children's attachment differences? To answer this question, Mary Ainsworth (1979) designed the *strange situation* experiment. She observed mother-infant pairs at home during their first 6 months. Later she observed the 1-year-old infants in a strange situation (usually a laboratory playroom). Such research has shown that about 60 percent of infants display *secure attachment*. In their mother's presence they play comfortably, happily exploring their new environment. When she leaves, they become distressed; when she returns, they seek contact with her.

Other infants avoid attachment or show *insecure attachment*, marked either by anxiety or avoidance of trusting relationships. They are less likely to explore their surroundings; they may even cling to their mother. When she leaves, they either cry loudly and remain upset or seem indifferent to her departure and return (Ainsworth, 1973, 1989; Kagan, 1995; van IJzendoorn & Kroonenberg, 1988).

Ainsworth and others found that sensitive, responsive mothers—those who noticed what their babies were doing and responded appropriately—had infants who exhibited secure attachment (De Wolff & van IJzendoorn, 1997). Insensitive, unresponsive mothers—mothers who attended to their babies when they felt like doing so but ignored them at other times—often had infants who were insecurely attached. The Harlows' monkey studies, with unresponsive artificial mothers, produced even more striking effects. When put in strange situations without their artificial mothers, the deprived infants were terrified (**FIGURE 48.2**).

But is attachment style the *result* of parenting? Or is attachment style the result of genetically influenced **temperament**—a person's characteristic emotional reactivity and intensity?

As most parents will tell you after having their second child, babies differ even before gulping their first breath. Heredity predisposes temperament differences (Rothbart, 2007).

temperament a person's characteristic emotional reactivity and intensity.

AP® Exam Tip

Note that temperament is a contribution from the nature side of the nature–nurture debate.

From their first weeks of life, some infants are reactive, intense, and fidgety. Others are easygoing, quiet, and placid. *Difficult* babies are more irritable, intense, and unpredictable. *Easy* babies are cheerful, relaxed, and predictable in feeding and sleeping. *Slow-to-warm-up* infants tend to resist or withdraw from new people and situations (Chess & Thomas, 1987; Thomas & Chess, 1977). And temperament differences typically persist. Consider:

- The most emotionally reactive newborns tend also to be the most reactive 9-month-olds (Wilson & Matheny, 1986; Worobey & Blajda, 1989).
- Exceptionally inhibited and fearful 2-year-olds often are still relatively shy as 8-year-olds; about half will become introverted adolescents (Kagan et al., 1992, 1994).
- The most emotionally intense preschoolers tend to be relatively intense young adults (Larsen & Diener, 1987). In one study of more than 900 New Zealanders, emotionally reactive and impulsive 3-year-olds developed into somewhat more impulsive, aggressive, and conflict-prone 21-year-olds (Caspi, 2000).

The genetic effect appears in physiological differences. Anxious, inhibited infants have high and variable heart rates and a reactive nervous system. When facing new or strange situations, they become more physiologically aroused (Kagan & Snidman, 2004). One form of a gene that regulates the neurotransmitter serotonin predisposes a fearful temperament and, in combination with unsupportive caregiving, an inhibited child (Fox et al., 2007). Such evidence adds to the emerging conclusion that our biologically rooted temperament helps form our enduring personality (McCrae et al., 2000, 2007; Rothbart et al., 2000).

By neglecting such inborn differences, the parenting studies, noted Judith Harris (1998), are like “comparing foxhounds reared in kennels with poodles reared in apartments.” So to separate nature and nurture, we would need to vary parenting while controlling temperament. (Pause and think: If you were the researcher, how might you have done this?)

One Dutch researcher’s solution was to randomly assign 100 temperamentally difficult 6- to 9-month-olds to either an experimental group, in which mothers received personal training in sensitive responding, or to a control group, in which they did not (van den Boom, 1990, 1995). At 12 months of age, 68 percent of the infants in the experimental group were rated securely attached, as were only 28 percent of the control group infants. Other studies support the idea that intervention programs can increase parental sensitivity and, to a lesser extent, infant attachment security (Bakermans-Kranenburg et al., 2003; Van Zeijl et al., 2006).

As these examples indicate, researchers have more often studied mother care than father care. Infants who lack a caring mother are said to suffer “maternal deprivation”;

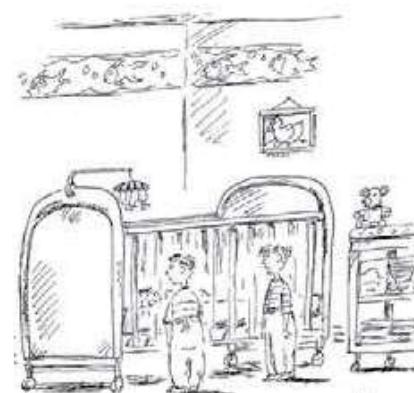
Harlow Primate Laboratory



Figure 48.2

Social deprivation and fear

In the Harlows’ experiments, monkeys raised with artificial mothers were terror-stricken when placed in strange situations without those mothers. (Today’s climate of greater respect for animal welfare prevents such primate studies.)

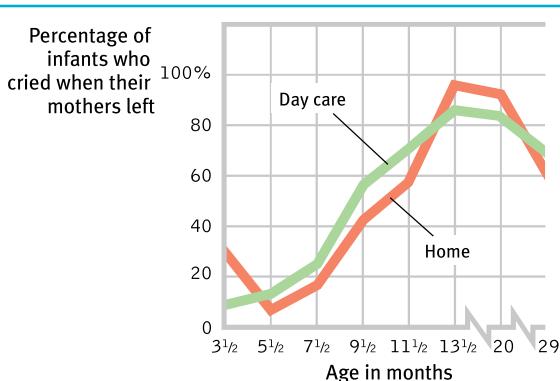


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d85/ZUMA Press/Newscom

Full-time dad Financial analyst Walter Cranford, shown here with his baby twins, is one of a growing number of stay-at-home dads. Cranford says the experience has made him appreciate how difficult the work can be: “Sometimes at work you can just unplug, but with this you’ve got to be going all the time.”

**Figure 48.3****Infants' distress over separation from parents**

In an experiment, groups of infants were left by their mothers in an unfamiliar room. In both groups, the percentage who cried when the mother left peaked at about 13 months. Whether the infant had experienced day care made little difference. (From Kagan, 1976.)



Jouke van Keulen/Shutterstock

those lacking a father's care merely experience "father absence." This reflects a wider attitude in which "fathering a child" has meant impregnating, and "mothering" has meant nurturing.

But fathers are more than just mobile sperm banks. Across nearly 100 studies worldwide, a father's love and acceptance have been comparable to a mother's love in predicting their offspring's health and well-being (Rohner & Veneziano, 2001). In one mammoth British study following 7259 children from birth to adulthood, those whose fathers were most

involved in parenting (through outings, reading to them, and taking an interest in their education) tended to achieve more in school, even after controlling for other factors such as parental education and family wealth (Flouri & Buchanan, 2004).

Children's anxiety over separation from parents peaks at around 13 months, then gradually declines (**FIGURE 48.3**). This happens whether they live with one parent or two, are cared for at home or in a day-care center, live in North America, Guatemala, or the Kalahari Desert. Does this mean our need for and love of others also fades away? Hardly. Our capacity for love grows, and our pleasure in touching and holding those we love never ceases. The power of early attachment does nonetheless gradually relax, allowing us to move out into a wider range of situations, communicate with strangers more freely, and stay emotionally attached to loved ones despite distance.

Attachment Styles and Later Relationships

Developmental theorist Erik Erikson (1902–1994), working with his wife, Joan Erikson, believed that securely attached children approach life with a sense of **basic trust**—a sense that the world is predictable and reliable. He attributed basic trust not to environment or inborn temperament, but to early parenting. He theorized that infants blessed with sensitive, loving caregivers form a lifelong attitude of trust rather than fear. (Later, we'll consider Erikson's other stages of development.)

Although debate continues, many researchers now believe that our early attachments form the foundation for our adult relationships and our comfort with affection and intimacy (Birnbaum et al., 2006; Fraley et al., 2013). Our adult styles of romantic love tend to exhibit either secure, trusting attachment; insecure, anxious attachment; or the avoidance of attachment (Feeney & Noller, 1990; Rholes & Simpson, 2004; Shaver & Mikulincer, 2007). These adult attachment styles in turn affect relationships with one's own children, as avoidant people find parenting more stressful and unsatisfying (Rholes et al., 2006).

Attachment style is also associated with motivation (Elliot & Reis, 2003). Securely attached people exhibit less fear of failure and a greater drive to achieve. But say this for those (nearly half of all humans) who exhibit insecure attachments: Anxious or avoidant tendencies have helped our groups detect or escape dangers (Ein-Dor et al., 2010).

Deprivation of Attachment

48-3 Does childhood neglect, abuse, or family disruption affect children's attachments?

If secure attachment nurtures social trust, what happens when circumstances prevent a child from forming attachments? In all of psychology, there is no sadder research literature. Babies locked away at home under conditions of abuse or extreme neglect are often withdrawn, frightened, even speechless. The same is true of those raised in institutions without the stimulation and attention of a regular caregiver, as was tragically illustrated during the

"Out of the conflict between trust and mistrust, the infant develops hope, which is the earliest form of what gradually becomes faith in adults." -ERIK ERIKSON (1983)

basic trust according to Erik Erikson, a sense that the world is predictable and trustworthy; said to be formed during infancy by appropriate experiences with responsive caregivers.

"What is learned in the cradle, lasts to the grave." -FRENCH PROVERB

Mike Abramans/Alamy



The deprivation of attachment

In this Romanian orphanage, the 250 children between ages 1 and 5 outnumbered caregivers 15 to 1.

1970s and 1980s in Romania. Having decided that economic growth for his impoverished country required more human capital, Nicolae Ceaușescu, Romania's Communist dictator, outlawed contraception, forbade abortion, and taxed families with fewer than five children. The birthrate indeed skyrocketed. But unable to afford the children they had been coerced into having, many families abandoned them to government-run orphanages with untrained and overworked staff. Child-to-caregiver ratios often were 15 to 1 (and you thought babysitting triplets was a strain), so the children were deprived of healthy attachment with at least one adult. When tested after Ceaușescu was assassinated in 1989, these children had lower intelligence scores and double the 20 percent rate of anxiety symptoms found in children assigned to quality foster care settings (Nelson et al., 2009). Dozens of other studies across 19 countries have confirmed that orphaned children tend to fare better on later intelligence tests if raised in family homes. This is especially so for those placed at an early age (van IJzendoorn et al., 2008).

Most children growing up under adversity (as did the surviving children of the Holocaust) are *resilient*; they withstand the trauma and become normal adults (Helmreich, 1992; Masten, 2001). So do most victims of childhood sexual abuse, noted Harvard researcher Susan Clancy (2010), while emphasizing that using children for sex is revolting and never the victim's fault.

But others, especially those who experience no sharp break from their abusive past, don't bounce back so readily. The Harlows' monkeys raised in total isolation, without even an artificial mother, bore lifelong scars. As adults, when placed with other monkeys their age, they either cowered in fright or lashed out in aggression. When they reached sexual maturity, most were incapable of mating. If artificially impregnated, females often were neglectful, abusive, even murderous toward their first-born. Another primate experiment confirmed the abuse-breeds-abuse phenomenon. In one study, 9 of 16 females who had been abused by their mothers became abusive parents, as did *no* female raised by a nonabusive mother (Maestripieri, 2005).

In humans, too, the unloved may become the unloving. Most abusive parents—and many condemned murderers—have reported being neglected or battered as children (Kempe & Kempe, 1978; Lewis et al., 1988). Some 30 percent of people who have been abused later abuse their children—a rate lower than that found in the primate study, but four times the U.S. national rate of child abuse (Dumont et al., 2007; Kaufman & Zigler, 1987).

Although most abused children do *not* later become violent criminals or abusive parents, extreme early trauma may nevertheless leave footprints on the brain. Abused children exhibit hypersensitivity to angry faces (Pollak, 2008). As adults, they exhibit stronger startle responses (Jovanovic et al., 2009). If repeatedly threatened and attacked while young, normally placid golden hamsters grow up to be cowards when caged with same-sized hamsters, or bullies when caged with weaker ones (Ferris, 1996). Such animals show changes in

the brain chemical serotonin, which calms aggressive impulses. A similarly sluggish serotonin response has been found in abused children who become aggressive teens and adults. "Stress can set off a ripple of hormonal changes that permanently wire a child's brain to cope with a malevolent world," concluded abuse researcher Martin Teicher (2002).

Such findings help explain why young children who have survived severe or prolonged physical abuse, childhood sexual abuse, or wartime atrocities are at increased risk for health problems, psychological disorders, substance abuse, and criminality (Freyd et al., 2005; Kendall-Tackett et al., 1993, 2004; Wegman & Stetler, 2009). Abuse victims are at considerable risk for depression if they carry a gene variation that spurs stress-hormone production (Bradley et al., 2008). As we will see again and again, behavior and emotion arise from a particular environment interacting with particular genes.

Adults also suffer when attachment bonds are severed. Whether through death or separation, a break produces a predictable sequence. Agitated preoccupation with the lost partner is followed by deep sadness and, eventually, the beginnings of emotional detachment and a return to normal living (Hazan & Shaver, 1994). Newly separated couples who have long ago ceased feeling affection are sometimes surprised at their desire to be near the former partner. Deep and longstanding attachments seldom break quickly. Detaching is a process, not an event.

Day Care

48-4 How does day care affect children?

In the mid-twentieth century, when mom-at-home was the social norm, researchers asked, "Is day care bad for children? Does it disrupt children's attachments to their parents?" For the high-quality day-care programs usually studied, the answer was No. In *Mother Care/Other Care*, developmental psychologist Sandra Scarr (1986) explained that children are "biologically sturdy individuals . . . who can thrive in a wide variety of life situations." Scarr spoke for many developmental psychologists, whose research has uncovered no major impact of maternal employment on children's development, attachments, and achievements (Friedman & Boyle, 2008; Goldberg et al., 2008; Lucas-Thompson et al., 2010).

Research then shifted to the effects of differing quality of day care on different types and ages of children (Vandell et al., 2010). Scarr (1997) explained: Around the world, "high-quality child care consists of warm, supportive interactions with adults in a safe, healthy, and stimulating environment. . . . Poor care is boring and unresponsive to children's needs." Even well-run orphanages can produce healthy, thriving children. In Africa and Asia, where more

and more children are losing parents to AIDS and other diseases, orphanages typically are unlike those in Ceaușescu's Romania, and the children living in quality orphanages fare about as well as those living in communities (Whetten et al., 2009).

Children's ability to thrive under varied types of responsive caregiving should not surprise us, given cultural variations in attachment patterns. Westernized attachment features one or two caregivers and their offspring. In other cultures, such as the Efe of Zaire, multiple caregivers are the norm (Field, 1996; Whaley et al., 2002). Even before the mother holds her newborn, the baby is passed among several women. In the weeks to come, the infant will be constantly held (and fed) by other women. The result is strong multiple attachments.

One ongoing study in 10 American cities has followed 1100 children since the age of 1 month. The researchers found that

An example of high-quality day care Research has shown that young children thrive socially and intellectually in safe, stimulating environments with a ratio of one caregiver for every three or four children.



AP Photo/Imperial Valley Press, Cuauhtemoc Beltran

at ages 4½ to 6, children who had spent the most time in day care had slightly advanced thinking and language skills. They also had an increased rate of aggressiveness and defiance (NICHD, 2002, 2003, 2006). To developmental psychologist Eleanor Maccoby (2003), the positive correlation between the increased rate of problem behaviors and time spent in child care suggested “some risk for some children spending extended time in some day-care settings as they’re now organized.” But the child’s temperament, the parents’ sensitivity, and the family’s economic and educational level influenced aggression more than time spent in day care.

There is little disagreement that the children who merely exist for 9 hours a day in understaffed centers deserve better. What all children need is a consistent, warm relationship with people whom they can learn to trust. The importance of such relationships extends beyond the preschool years, as Finnish psychologist Lea Pulkkinen (2006) observed in her career-long study of 285 individuals tracked from age 8 to 42. Her finding—that adult monitoring of children predicts favorable outcomes—led her to undertake, with support from Finland’s parliament, a nationwide program of adult-supervised activities for all first and second graders (Pulkkinen, 2004; Rose, 2004).

Self-Concept

48-5 How do children’s self-concepts develop?

Infancy’s major social achievement is attachment. *Childhood’s* major social achievement is a positive sense of self. By the end of childhood, at about age 12, most children have developed a **self-concept**—an understanding and assessment of who they are. (Their *self-esteem* is how they feel about who they are.) Parents often wonder when and how this sense of self develops. “Is my baby girl aware of herself—does she know she is a person distinct from everyone else?”

Of course we cannot ask the baby directly, but we can again capitalize on what she can do—letting her *behavior* provide clues to the beginnings of her self-awareness. In 1877, biologist Charles Darwin offered one idea: Self-awareness begins when we recognize ourselves in a mirror. To see whether a child recognizes that the girl in the mirror is indeed herself, researchers sneakily dabbed color on the nose. At about 6 months, children reach out to touch their mirror image as if it were another child (Courage & Howe, 2002; Damon & Hart, 1982, 1988, 1992). By 15 to 18 months, they begin to touch their own noses when they see the colored spot in the mirror (Butterworth, 1992; Gallup & Suarez, 1986). Apparently, 18-month-olds have a schema of how their face should look, and they wonder, “What is that spot doing on *my* face?”



Kate Nurture/Worth Publishers

Self-awareness Mirror images fascinate infants from the age of about 6 months. Only at about 18 months, however, does the child recognize that the image in the mirror is “me.”

AP Photo/National Academy of Sciences, Courtesy of Joshua Plotnik, Frans de Waal, and Diana Reiss



Self-aware animals After prolonged exposure to mirrors, several species—chimpanzees, orangutans, gorillas, dolphins, elephants, and magpies—have similarly demonstrated self-recognition of their mirror image (Gallup, 1970; Reis & Marino, 2001; Prior et al., 2008). In an experiment by Joshua Plotnik and colleagues (2006), Happy, an Asian elephant, when facing a mirror, repeatedly used her trunk to touch an “X” painted above her eye (but not a similar mark above the other eye that was visible only under black light). As one report said, “She’s Happy and she knows it!”

self-concept all our thoughts and feelings about ourselves, in answer to the question, “Who am I?”

By school age, children's self-concept has blossomed into more detailed descriptions that include their gender, group memberships, psychological traits, and similarities and differences compared with other children (Newman & Ruble, 1988; Stipek, 1992). They come to see themselves as good and skillful in some ways but not others. They form a concept of which traits, ideally, they would like to have. By age 8 or 10, their self-image is quite stable.

Children's views of themselves affect their actions. Children who form a positive self-concept are more confident, independent, optimistic, assertive, and sociable (Maccoby, 1980). So how can parents encourage a positive yet realistic self-concept?

Parenting Styles

48-6

What are three parenting styles, and how do children's traits relate to them?

Some parents spank, some reason. Some are strict, some are lax. Some show little affection, some liberally hug and kiss. Do such differences in parenting styles affect children?

The most heavily researched aspect of parenting has been how, and to what extent, parents seek to control their children. Investigators have identified three parenting styles:

1. **Authoritarian** parents impose rules and expect obedience: "Don't interrupt." "Keep your room clean." "Don't stay out late or you'll be grounded." "Why? Because I said so."
2. **Permissive** parents submit to their children's desires. They make few demands and use little punishment.
3. **Authoritative** parents are both demanding and responsive. They exert control by setting rules and enforcing them, but they also explain the reasons for rules. And, especially with older children, they encourage open discussion when making the rules and allow exceptions.

AP® Exam Tip

It's understandable if you are struggling to remember the differences between authoritarian and authoritative—these words are exactly the same through the first nine letters! Maybe it will help to realize that authoritative parents will engage in a little more give and take, and that the words *give* and *authoritative* both end in the letters *ive*.

Too hard, too soft, and just right, these styles have been called, especially by pioneering researcher Diana Baumrind and her followers. Research indicates that children with the highest self-esteem, self-reliance, and social competence usually have warm, concerned, *authoritative* parents (Baumrind, 1996; Buri et al., 1988; Coopersmith, 1967). Those with authoritarian parents tend to have less social skill and self-esteem, and those with permissive parents tend to be more aggressive and immature. The participants in most studies have been middle-class White families, and some critics suggest that effective parenting may vary by culture. Yet studies with families of other races and in more than 200 cultures worldwide have confirmed the social and academic correlates of loving and authoritative parenting (Rohner & Veneziano, 2001; Sorkhabi, 2005; Steinberg & Morris, 2001). For example, two studies of thousands of Germans found that those whose parents had maintained a curfew exhibited better adjustment and greater achievements in young adulthood than did those with permissive parents (Haase et al., 2008). And the effects are stronger when children are embedded in *authoritative communities* with connected adults who model a good life (Commission on Children at Risk, 2003).

A word of caution: The association between certain parenting styles (being firm but open) and certain childhood outcomes (social competence) is correlational. *Correlation is not causation.* Here are two possible alternative explanations for this parenting-competence link.

- Children's traits may influence parenting. Parental warmth and control vary somewhat from child to child, even in the same family (Holden & Miller, 1999). Perhaps socially mature, agreeable, easygoing children *evoke* greater trust and warmth from their parents. Twin studies have supported this possibility (Kendler, 1996).
- Some underlying third factor may be at work. Perhaps, for example, competent parents and their competent children share genes that predispose social competence. Twin studies have also supported this possibility (South et al., 2008).

Parents who struggle with conflicting advice should remember that *all advice reflects the advice-giver's values*. For those who prize unquestioning obedience from a child, an authoritarian style may have the desired effect. For those who value children's sociability and self-reliance, authoritative firm-but-open parenting is advisable.

Culture and Child Raising

Child-raising practices reflect cultural values that vary across time and place. Do you prefer children who are independent or children who comply? If you live in a Westernized culture, the odds are you prefer independence. "You are responsible for yourself," Western families and schools tell their children. "Follow your conscience. Be true to yourself. Discover your gifts. Think through your personal needs." A half-century and more ago, Western cultural values placed greater priority on obedience, respect, and sensitivity to others (Alwin, 1990;

Remley, 1988). "Be true to your traditions," parents then taught their children. "Be loyal to your heritage and country. Show respect toward your parents and other superiors." Cultures can change.

Many Asians and Africans live in cultures that value emotional closeness. Rather than being given their own bedrooms and entrusted to day care, infants and toddlers may sleep with their mothers and spend their days close to a family member (Morelli et al., 1992; Whiting & Edwards, 1988). These cultures encourage a strong sense of *family self*—a feeling that what shames the child shames the family, and what brings honor to the family brings honor to the self.

Children across place and time have thrived under various child-raising systems. Upper-class British parents traditionally handed off routine caregiving to nannies, then sent their 10-year-olds off to boarding school. These children generally grew up to be pillars of British society, as did their parents and their boarding-school peers. In the African Gusii society, babies nurse freely but spend most of the day on their mother's back—with lots of body contact but little face-to-face and language interaction. When the mother becomes pregnant again, the toddler is weaned and handed over to someone else, often an older sibling. Westerners may wonder about the negative effects of this lack of verbal interaction, but then the African Gusii may in turn wonder about Western mothers pushing their babies around in strollers and leaving them in playpens (Small, 1997). Such diversity in child raising cautions us against presuming that our culture's way is the only way to raise children successfully.

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Cultures vary Parents everywhere care about their children, but raise and protect them differently depending on the surrounding culture. Parents raising children in New York City keep them close. In Scotland's Orkney Islands' town of Stromness, social trust has enabled parents to park their toddlers outside shops.

Indeed/City Images



Parental involvement promotes development Parents in every culture facilitate their children's discovery of their world, but cultures differ in what they deem important. Asian cultures place more emphasis on school and hard work than do North American cultures. This may help explain why Japanese and Taiwanese children get higher scores on mathematics achievement tests.

"You are the bows from which your children as living arrows are sent forth." -KAHLIL GIBRAN, *THE PROPHET*, 1923

* * *

The investment in raising a child buys many years not only of joy and love but of worry and irritation. Yet for most people who become parents, a child is one's biological and social legacy—one's personal investment in the human future. To paraphrase psychiatrist Carl Jung, we reach backward into our parents and forward into our children, and through their children into a future we will never see, but about which we must therefore care.

Before You Move On

► ASK YOURSELF

How would you describe your own temperament? Is it similar to that of other family members, or quite different?

► TEST YOURSELF

What distinguishes imprinting from attachment?

Answers to the Test Yourself questions can be found in Appendix E at the end of the book.

Module 48 Review

48-1 How do parent-infant attachment bonds form?

- At about 8 months, soon after object permanence develops, children separated from their caregivers display *stranger anxiety*.
- Infants form *attachments* not simply because parents gratify biological needs but, more important, because they are comfortable, familiar, and responsive.
- Ducks and other animals have a more rigid attachment process, called *imprinting*, that occurs during a *critical period*.

48-2 How have psychologists studied attachment differences, and what have they learned about the effects of temperament and parenting?

- Attachment has been studied in strange situation experiments, which show that some children are securely attached and others are insecurely attached.
- Sensitive, responsive parents tend to have securely attached children.
- Adult relationships seem to reflect the attachment styles of early childhood, lending support to Erik Erikson's idea that *basic trust* is formed in infancy by our experiences with responsive caregivers.

- Yet it's become clear that *temperament*—our characteristic emotional reactivity and intensity—also plays a huge role in how our attachment patterns form.

48-3 Does childhood neglect, abuse, or family disruption affect children's attachments?

- Children are very resilient, but those who are moved repeatedly, severely neglected by their parents, or otherwise prevented from forming attachments by an early age may be at risk for attachment problems.

48-4 How does day care affect children?

- Quality day care, with responsive adults interacting with children in a safe and stimulating environment, does not appear to harm children's thinking and language skills.
- Some studies have linked extensive time in day care with increased aggressiveness and defiance, but other factors—the child's temperament, the parents' sensitivity, and the family's economic and educational levels and culture—also matter.

48-5 How do children's self-concepts develop?

- *Self-concept*, an understanding and evaluation of who we are, emerges gradually.
 - At 15 to 18 months, children recognize themselves in a mirror.
 - By school age, they can describe many of their own traits, and by ages 8 to 10 their self-image is stable.

Multiple-Choice Questions

1. An 18-month-old typically recognizes herself in a mirror. This self-awareness contributes to
 - a. self-assurance.
 - b. self-concept.
 - c. self-esteem.
 - d. self-actualization.
 - e. self-determination.
2. In the attachment studies conducted with infant monkeys, what did the Harlows find?
 - a. Nutrition was the most important factor in attachment.
 - b. Contact comfort was the most important factor in attachment.
 - c. The surrogate mother's appearance was the most important attachment factor.
 - d. Monkeys were equally likely to become attached to either surrogate mother.
 - e. The monkeys didn't form attachments to the surrogate mothers.
3. What do we call an optimal window of opportunity for proper development?
 - a. Attachment
 - b. The critical period
 - c. The social period
 - d. Imprinting
 - e. Mere exposure

48-6 What are three parenting styles, and how do children's traits relate to them?

- Parenting styles—authoritarian, permissive, and authoritative—reflect varying degrees of control.
- Children with high self-esteem tend to have authoritative parents and to be self-reliant and socially competent, but the direction of cause and effect in this relationship is not clear.

4. Which of the following identifies the parenting style most likely to ground a teen who had missed a curfew—and to explain the rationale for doing so, after considering the teen's reasons?
 - a. Authoritative
 - b. Authoritarian
 - c. Permissive
 - d. Secure attachment
 - e. Insecure attachment
5. Which of the following would be considered a sign of secure attachment in a 1-year-old?
 - a. Showing no sign of stranger anxiety, whether the parent is present or not
 - b. Paying no attention to a parent who returns after a brief separation
 - c. Showing anger at the parent after a brief separation
 - d. Becoming distressed when the parent leaves and seeking contact on return
 - e. Not reacting to a parent leaving or returning after a brief separation
6. Who identified secure and insecure attachment?
 - a. Sigmund Freud
 - b. Konrad Lorenz
 - c. Jean Piaget
 - d. Mary Ainsworth
 - e. Jerome Kagan

Practice FRQs

1. Name and describe the three types of infant temperaments.

Answer

1 point: Easy: These babies are easygoing, cheerful, predictable, and placid.

1 point: Difficult: These babies are emotionally reactive, intense, irritable, and unpredictable.

1 point: Slow to warm up: These babies resist and withdraw from new people or situations.

2. Name and describe Diana Baumrind's three parenting styles.

(3 points)

Module 49

Gender Development

Module Learning Objectives

- 49-1** Discuss gender similarities and differences in psychological traits.
- 49-2** Discuss the importance of gender roles and gender typing in development.

gender the socially constructed roles and characteristics by which a culture defines *male* and *female*.

FYI

Pink and blue baby outfits offer another example of how cultural norms vary and change. “The generally accepted rule is pink for the boy and blue for the girl,” declared the publication *Earnshaw’s Infants’ Department* in June 1918 (Maglaty, 2011). “The reason is that pink being a more decided and stronger color is more suitable for the boy, while blue, which is more delicate and dainty, is prettier for the girls.”

AP® Exam Tip

There is a lot of information in this section. One good way to process these differences and similarities between genders is to consider which facts fit prevailing stereotypes and which don’t. You may even want to keep a list.

As we saw in Module 34, we humans share an irresistible urge to organize our worlds into simple categories. Among the ways we classify people—as tall or short, fat or slim, smart or dull—one stands out: Before or at your birth, everyone wanted to know, “Boy or girl?” From that time on, your sex (your biological status, defined by your chromosomes and anatomy) helped define your **gender**, the socially constructed roles and characteristics by which your culture defines *male* and *female*. Guided by our culture, our gender influences our social development.

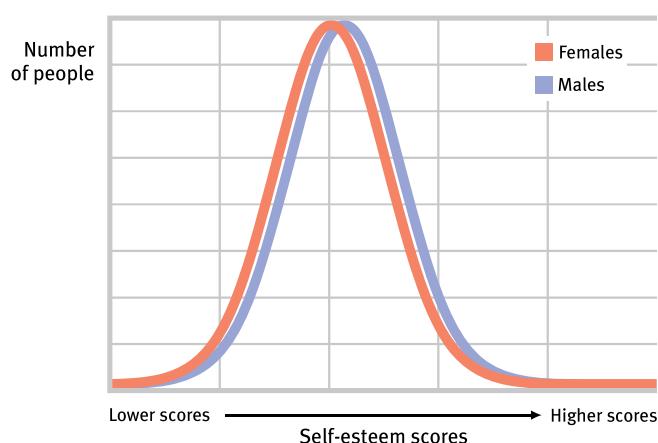


How Are We Alike? How Do We Differ?

- 49-1** What are some gender similarities and differences in aggression, social power, and social connectedness?

Having faced similar adaptive challenges, we are in most ways alike. Tell me whether you are male or female and you give me virtually no clues to your vocabulary, intelligence, and happiness, or to the mechanisms by which you see, hear, learn, and remember. Your “opposite” sex is, in reality, your very similar sex. At conception, you received 23 chromosomes from your mother and 23 from your father. Of those 46 chromosomes, 45 are unisex—the same for males and females. (In Module 53, we’ll return to that forty-sixth chromosome.)

But males and females do differ, and differences command attention—stimulating more than 18,000 studies (Ellis et al., 2008). Some much-talked-about gender differences are actually quite modest, as Janet Shibley Hyde (2005) illustrated by graphically representing male and female self-esteem scores across many studies (**FIGURE 49.1**). Other differences are more striking. Compared with the average man, the average woman enters puberty 2 years sooner, and her life span is 5 years longer. She carries 70 percent more fat, has 40 percent less muscle, and is 5 inches shorter. She expresses emotions more freely, can smell fainter odors, and is offered help more often. She can become sexually re-aroused soon after orgasm. She is also doubly vulnerable to depression and anxiety, and her risk of developing an eating disorder is 10 times greater than the average man’s. Yet, he is some 4 times more likely to commit suicide or develop alcohol use disorder. He is also more likely to be diagnosed with autism spectrum disorder, color-blindness, attention-deficit/hyperactivity disorder as a child, and antisocial personality disorder as an adult. Choose your gender and pick your vulnerability.

**Figure 49.1**

Much ado about a small difference in self-esteem These two normal distributions differ by the approximate magnitude of the gender difference in self-esteem, averaged over all available samples (Hyde, 2005). Moreover, such comparisons illustrate differences between the average woman and man. The variation among individual women greatly exceeds this difference, as it also does among individual men.

Gender differences appear throughout this book. For now, let's consider some gender differences in aggression, social power, and social connectedness. (Note that these differences between the *average* woman and man do not necessarily describe any individual woman or man.)

Gender and Aggression

In surveys, men admit to more **aggression** than women do. This aggression gender gap pertains to harmful physical aggression, rather than indirect or verbal relational aggression such as ostracism or spreading rumors. As John Archer (2004, 2006, 2009) has noted, based on statistical digests of dozens of studies, women may be slightly more likely to commit acts of relational aggression, such as passing along malicious gossip. The gap appears in everyday life at various ages and in various cultures, especially cultures with gender inequality (Archer, 2009).

Men's tendency to behave more aggressively can be seen in experiments where they deliver what they believe are more painful electric shocks (Card et al., 2008). Violent crime rates illustrate the gender difference even more strikingly. The male-to-female arrest ratio for murder, for example, is 9 to 1 in the United States and 8 to 1 in Canada (FBI, 2009; Statistics Canada, 2010). Throughout the world, fighting, warring, and hunting are primarily men's activities (Wood & Eagly, 2002, 2007). Men also express more support for war. The Iraq war, for example, was consistently supported more by American men than by American women (Newport et al., 2007).



VLADIMIR FEDORENKO/AP/GettyImages

Gender difference in aggression Around the world, fighting, violent crime, and blowing things up are mostly men's activities. This is why many were surprised to hear that female suicide bombers were responsible for the 2010 Moscow subway bombing that killed dozens.

Gender and Social Power

Close your eyes and imagine two adults standing side by side. The one on the left is dominant, forceful, and independent. The one on the right is submissive, nurturing, and socially connected.

Did you see the person on the left as a man, and the one on the right as a woman? If so, you are not alone.

Around the world, from Nigeria to New Zealand, people perceive such power differences between men and women (Williams & Best, 1990). Indeed, in most societies men *do* place more importance on power and achievement and *are* socially dominant (Schwartz &

aggression any physical or verbal behavior intended to hurt or destroy.

FYI

Women's 2011 representation in national parliaments ranged from 11 percent in the Arab States to 42 percent in Scandinavia (IPU, 2011).

FYI

Question: Why does it take 200 million sperm to fertilize one egg?
Answer: Because they won't stop for directions.

Rubel-Lifschitz, 2009). When groups form, whether as juries or companies, leadership tends to go to males (Colarelli et al., 2006). When salaries are paid, those in traditionally male occupations receive more. And when political leaders are elected, they usually are men, who held 80 percent of the seats in the world's governing parliaments in 2011 (IPU, 2011). If perceived to be hungry for political power (thus violating gender norms), women more than men suffer voter backlash (Okimoto & Brescoll, 2010). Men's power hunger is more expected and accepted.

As leaders, men tend to be more *directive*, even autocratic. Women tend to be more *democratic*, more welcoming of subordinates' input in decision making (Eagly & Carli, 2007; van Engen & Willemse, 2004). When people interact, men are more likely to utter opinions, women to express support (Aries, 1987; Wood, 1987). In everyday behavior, men tend to act as powerful people often do: They are more likely to talk assertively, interrupt, initiate touches, and stare. And they smile and apologize less (Leaper & Ayres, 2007; Major et al., 1990; Schumann & Ross, 2010). Such behaviors help sustain social power inequities.

Gender and Social Connectedness

In the 1980s, many developmental psychologists believed that all children struggle to create a separate, independent identity. Research by Carol Gilligan and her colleagues (1982, 1990), however, suggested that this struggle describes Western individualist males more than relationship-oriented females. Gilligan believed females tend to differ from males both in being less concerned with viewing themselves as separate individuals and in being more concerned with "making connections." Indeed, later research has found that females are more *interdependent* than males, and this difference surfaces early. In children's play, boys typically form large groups. Their games tend to be active and competitive, with little intimate discussion (Rose & Rudolph, 2006). Studies have found that girls usually play in smaller groups, often with one friend. Their play is less competitive and more imitative of social relationships (Maccoby, 1990; Roberts, 1991).

As adults, women take more pleasure in talking face to face, and they more often use conversation to explore relationships. Men enjoy doing activities side by side and tend to use conversation to communicate solutions (Tannen, 1990; Wright, 1989). The communication difference is apparent in student e-mails: In one New Zealand study, people could correctly guess the author's gender two-thirds of the time (Thomson & Murachver, 2001).

Gender differences also appear in phone-based communication. In the United States, the average teen girl sends double the number of text messages of the average teen boy (Lenhart, 2010). In France, women have made 63 percent of phone calls and, when talking to a woman, stayed connected longer (7.2 minutes) than have men when talking to other men (4.6 minutes) (Smoreda & Licoppe, 2000).

Every man for himself, or tend and befriend?

Gender differences in the way we interact with others begin to appear at a very young age.



Gallo Images/Getty Images



Svetlana Bekyarova Photography/Getty Images

Women worldwide have oriented their interests and vocations more to people and less to things (Eagly, 2009; Lippa, 2005, 2006, 2008). One analysis of more than a half-million people's responses to various interest inventories revealed that "men prefer working with things and women prefer working with people" (Su et al., 2009). On entering college, American men are seven times more likely than women to express interest in computer science, and they contribute 87 percent of Wikipedia articles (Cohen, 2011; Pryor et al., 2011). In the workplace, women have been less driven by money and status and more often opted for reduced work hours (Pinker, 2008). In the home, they have been five times more likely than men to claim primary responsibility for taking care of children (*Time*, 2009).

Women's emphasis on caring helps explain another interesting finding: Although 69 percent of people have said they have a close relationship with their father, 90 percent said they feel close to their mother (Hugick, 1989). When wanting understanding and someone with whom to share worries and hurts, both men and women usually turn to women, and both have reported their friendships with women to be more intimate, enjoyable, and nurturing (Rubin, 1985; Sapadin, 1988). And when coping with their own stress, women more than men turn to others for support—they *tend and befriend* (Tamres et al., 2002; Taylor, 2002).

Gender differences in social connectedness, power, and other traits peak in late adolescence and early adulthood—the very years most commonly studied (also the years of dating and mating). As teenagers, girls become progressively less assertive and more flirtatious; boys become more domineering and unexpressive. Following the birth of a first child, parents (women especially) become more traditional in their gender-related attitudes and behavior (Ferriman et al., 2009; Katz-Wise et al., 2010). But studies have shown that by age 50, parenthood-related gender differences subside. Men become more empathic and less domineering, and women—especially those with paid employment—become more assertive and self-confident (Kasen et al., 2006; Maccoby, 1998).

What explains our diversity? How much does biology bend the genders? To what extent are we shaped by our cultures? A biopsychosocial view suggests both are important, thanks to the interplay among our biological dispositions, our developmental experiences, and our current situations (Eagly, 2009).

"In the long years liker must
they grow; The man be more of
woman, she of man." -ALFRED
LORD TENNYSON, *THE PRINCESS*, 1847

The Nurture of Gender: Our Culture

49-2 How do gender roles and gender typing influence gender development?

For most people, their biological sex and their gender are tightly intertwined. What biology initiates (as we will see in Module 53), culture accentuates.

Gender Roles

Culture is everything shared by a group and transmitted across generations. We can see culture's shaping power in **gender roles**—the social expectations that guide men's and women's behavior. (In psychology, as in the theater, a **role** refers to a cluster of prescribed actions, the behaviors we expect of those who occupy a particular social position.)

Gender roles vary over time and place. In North America, men were traditionally expected to initiate dates, drive the car, and pick up the check. Women were expected to decorate the home, buy and care for the children's clothes, and select the wedding gifts. Up through the 1990s, Mom (about 90 percent of the time in two-parent U.S. families) stayed home with a sick child, arranged for the babysitter, and called the doctor (Maccoby, 1995). Even in recent years, compared with employed women, employed men in the United States have daily spent about an hour and a half more on

gender role a set of expected behaviors for males or for females.

role a set of expectations (norms) about a social position, defining how those in the position ought to behave.



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"Sex brought us together, but gender drove us apart."

The gendered tsunami In Sri Lanka, Indonesia, and India, the gendered division of labor helps explain the excess of female deaths from the 2004 tsunami. In some villages, 80 percent of those killed were women, who were mostly at home while the men were more likely to be at sea fishing or doing out-of-the-home chores (Oxfam, 2005).



DPA/The Image Works

the job and about one hour less on household activities and caregiving (Amato et al., 2007; Bureau of Labor Statistics, 2004; Fisher et al., 2006). Ditto Australia, where, compared with men, women have devoted 54 percent more time to unpaid household work and 71 percent more time to child care (Trewin, 2001).

Other societies have different expectations. In nomadic societies of food-gathering people, there is little division of labor by sex. Boys and girls receive much the same upbringing. In agricultural societies, where women work in the nearby fields and men roam while herding livestock, children have typically been socialized into more distinct gender roles (Segall et al., 1990; Van Leeuwen, 1978).

Among industrialized countries, gender roles and attitudes vary widely. Australia and the Scandinavian countries offer the greatest gender equity, Middle Eastern and North African countries the least (Social Watch, 2006). And consider: Would you agree that “when jobs are scarce, men should have more rights to a job?” In the United States, Britain, and Spain, about one in eight adults agree. In Nigeria, Pakistan, and India, about four in five do (Pew, 2010). We are one species, but my, how we differ.

To see how gender role attitudes vary over time, consider women’s voting rights. At the opening of the twentieth century, only one country—New Zealand—granted women the right to vote (Briscoe, 1997). By the late 1960s and early 1970s, women had become a force in the voting booth and the workplace in many countries. Nearly 50 percent of employed Americans are now women, as are 54 percent of college graduates, up from 36 percent in just four decades (Fry & Cohn, 2010). In today’s postindustrial economy, the jobs expected to grow the most in the years ahead are the ones women have gravitated toward—those that require not size and strength but social intelligence, open communication, and the ability to sit still and focus (Rosin, 2010). These are big gender changes in but a thin slice of history.

Gender roles can smooth social relations, avoiding irritating discussions about whose job it is to get the car fixed and who should buy the birthday presents. But these quick and easy assumptions come at a cost: If we deviate from conventions, we may feel anxious.

How Do We Learn to Be Male or Female?

Gender identity is a person’s sense of being male or female. **Social learning theory** assumes that children acquire this identity by observing and imitating others’ gender-linked behaviors and by being rewarded or punished for acting in certain ways themselves (“Nicole, you’re such a good mommy to your dolls”; “Big boys don’t cry, Alex.”). Some critics have objected, saying that parental modeling and rewarding of male-female differences aren’t enough to explain **gender typing**, the way some children seem more attuned than others to traditional male or female roles (Lytton & Romney, 1991). In fact, even in families that discourage traditional gender typing, children organize themselves into “boy worlds” and “girl worlds,” each guided by rules for what boys and girls do.

Cognition (thinking) also matters. In your own childhood you formed concepts that helped you make sense of your world. One of these was your *gender schema*, your framework for organizing boy-girl characteristics (Bem, 1987, 1993). This gender schema then became a lens through which you viewed your experiences.

Gender schemas form early in life, and social learning helps form them. Before age 1, you began to discriminate male and female voices and faces (Martin et al., 2002). After age 2, language forced you to begin organizing your world on the basis of gender. English, for example, uses the pronouns *he* and *she*; other languages classify objects as masculine (“*le* train”) or feminine (“*la* table”).

FYI

In Module 30, we explored how children can learn—including the aggressive behavior modeled in Albert Bandura’s famous Bobo doll experiment—by observing others.

gender identity our sense of being male or female.

social learning theory the theory that we learn social behavior by observing and imitating and by being rewarded or punished.

gender typing the acquisition of a traditional masculine or feminine role.

Young children are “gender detectives” (Martin & Ruble, 2004). Once they grasp that two sorts of people exist—and that they are of one sort—they search for clues about gender, and they find them in language, dress, toys, and songs. Girls, they may decide, are the ones with long hair. Having divided the human world in half, 3-year-olds will then like their own kind better and seek them out for play. And having compared themselves with their concept of gender, they will adjust their behavior accordingly. (“I am male—thus, masculine, strong, aggressive,” or “I am female—therefore, feminine, sweet, and helpful.”) These rigid boy-girl stereotypes peak at about age 5 or 6. If the new neighbor is a boy, a 6-year-old girl may assume he just cannot share her interests. For young children, gender looms large.

For some people, comparing themselves with their culture’s concepts of gender produces feelings of confusion and discord. **Transgender** people’s *gender identity* (their sense of being male or female) or *gender expression* (their communication of gender identity through behavior or appearance) differs from that typical of their birth sex (APA, 2010). A person may feel like a man in a woman’s body, or a woman in a man’s body. These include *transsexual* people, who live, or wish to live, as members of the gender opposite to their birth sex, often aided by medical treatment that supports gender reassignment. Note that gender identity is distinct from *sexual orientation* (the direction of one’s sexual attraction). Transgender people may be heterosexual, homosexual, bisexual, or asexual.

Some transgender persons express their gender identity by dressing as a person of the other biological sex typically would. Most cross-dressers are biological males, the majority of whom feel an attraction to females (APA, 2010).

Before You Move On

► ASK YOURSELF

Do you consider yourself strongly gender typed or not strongly gender typed? What factors do you think have contributed to your feelings of masculinity or femininity?

► TEST YOURSELF

What are gender roles, and what do their variations tell us about our human capacity for learning and adaptation?

Answers to the Test Yourself questions can be found in Appendix E at the end of the book.



Courtesy of David Myers

The social learning of gender Children observe and imitate parental models.



AP Photo/The Canadian Press, Aaron Vincent Elkaim

Transgender contestant In 2012, Jenna Talackova became the first transgender beauty pageant contestant in this Miss Universe Canada contest in Toronto. Talackova was born a male but had sex-reassignment surgery.

“The more I was treated as a woman, the more woman I became.” -WRITER JAN MORRIS,
MALE-TO-FEMALE TRANSSEXUAL

transgender an umbrella term describing people whose gender identity or expression differs from that associated with their birth sex.

Module 49 Review

49-1

What are some gender similarities and differences in aggression, social power, and social connectedness?

- *Gender* refers to the socially constructed roles and characteristics by which a culture defines “male” and “female.”
- We are more alike than different, thanks to our similar genetic makeup—we see, hear, learn, and remember similarly. Males and females do differ in body fat, muscle, height, age of onset of puberty, life expectancy, and vulnerability to certain disorders.
- Men admit to more *aggression* than women do, and they are more likely to be physically aggressive. Women’s aggression is more likely to be relational.
- In most societies, men have more social power, and their leadership style tends to be directive, whereas women’s is more democratic.
- Women focus more on social connectedness, and they “tend and befriend.”

49-2

How do gender roles and gender typing influence gender development?

- *Gender roles*, the behaviors a culture expects from its males and females, vary across place and time.
- *Social learning theory* proposes that we learn *gender identity*—our sense of being male or female—as we learn other things: through reinforcement, punishment, and observation. Critics argue that cognition also plays a role because modeling and rewards cannot explain *gender typing*.
- *Transgender* people’s gender identity or expression differs from their birth sex. Their sexual orientation may be heterosexual, homosexual, bisexual, or asexual.

Multiple-Choice Questions

1. According to research, which type of aggression is more common among males than females?
 - a. Harmful physical aggression
 - b. Indirect nonphysical aggression
 - c. Verbal aggression
 - d. Ostracism
 - e. Spreading rumors
2. Gender _____ are the social expectations that guide men and women’s behavior. Gender _____ is a person’s sense of being male or female.
 - a. concepts; role
 - b. preferences; role
 - c. roles; preference
 - d. roles; identity
 - e. roles; preference
3. Which of the following is generally true of males?
 - a. They have a longer life span.
 - b. They are more likely to have a democratic leadership style.
 - c. They are more likely to commit suicide.
 - d. They are more likely to be diagnosed with depression.
 - e. They are more likely to be diagnosed with anxiety.
4. Diego likes to play sports and video games whereas Sara likes to sing, dance, and play “house.” This example best depicts which of the following?
 - a. Gender identity
 - b. Gender typing
 - c. Gender schema
 - d. Social learning theory
 - e. Gender expression
5. Carol Gilligan’s research emphasizes prominent female characteristics, especially
 - a. spatial abilities.
 - b. making social connections.
 - c. playing in large groups.
 - d. talking a great deal.
 - e. playing in competitive groups.

Practice FRQs

1. What are gender roles? What are gender schemas? How does social learning contribute to the formation of each?

Answer

1 point: Gender roles are the cultural norms for expected behaviors for males and females.

1 point: Gender schemas are the cognitive ways in which we organize boy-girl characteristics.

1 point: Social learning contributes to gender schema formation by the observation of gender roles, the rewarding of gender-appropriate behaviors, and the ways in which gender is discussed.

2. Give an example of a biological, a psychological, and a social factor that might contribute to gender differences.

(3 points)

Module 50

Parents, Peers, and Early Experiences

Module Learning Objectives

- 50-1** Describe how early experiences can modify the brain.
- 50-2** Describe the ways in which parents and peers shape children's development.



Our genes, as expressed in specific environments, influence our developmental differences. We are not "blank slates," note Douglas Kenrick and his colleagues (2009). We are more like coloring books, with certain lines predisposed and experience filling in the full picture. We are formed by nature *and* nurture. But what are the most influential components of our nurture? How do our early experiences, our family and peer relationships, and all our other experiences guide our development and contribute to our diversity?

Experience and Brain Development

50-1 How do early experiences modify the brain?

The formative nurture that conspires with nature begins at conception, as we have seen, with the prenatal environment in the womb. Embryos receive differing nutrition and varying levels of exposure to toxic agents. Nurture then continues outside the womb, where our early experiences foster brain development.

Our genes dictate our overall brain architecture, but experience fills in the details, developing neural connections and preparing our brain for thought and language and other later experiences. So how do early experiences leave their "marks" in the brain? Mark Rosenzweig, David Krech, and their colleagues (1962) opened a window on that process when they raised some young rats in solitary confinement and others in a communal playground. When they later analyzed the rats' brains, those raised in the enriched environment, which simulated a natural environment, usually developed a heavier and thicker brain cortex (**FIGURE 50.1**).

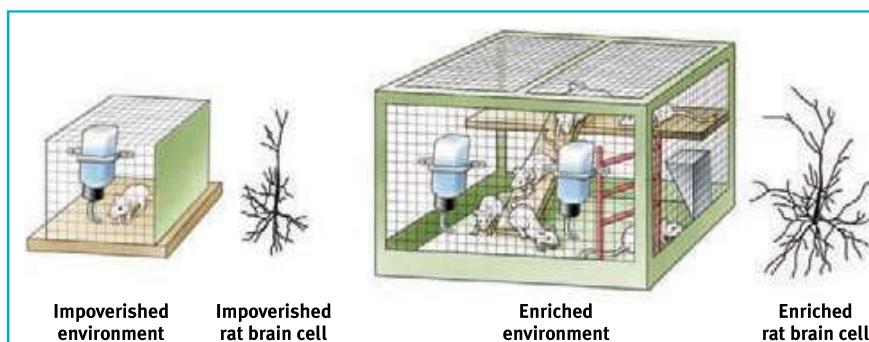
Rosenzweig was so surprised by this discovery that he repeated the experiment several times before publishing his findings (Renner & Rosenzweig, 1987; Rosenzweig, 1984). So great are the effects that, shown brief video clips of rats, you could tell from their activity and curiosity whether their environment had been impoverished or enriched (Renner & Renner, 1993). After 60 days in the enriched environment, the rats' brain weights increased 7 to 10 percent and the number of synapses mushroomed by about 20 percent (Kolb & Whishaw, 1998).

Courtesy of C. Brune



Stringing the circuits young

String musicians who started playing before age 12 have larger and more complex neural circuits controlling the note-making left-hand fingers than do string musicians whose training started later (Elbert et al., 1995).

**Figure 50.1**

Experience affects brain development Mark Rosenzweig, David Krech, and their colleagues raised rats either alone in an environment without playthings, or with other rats in an environment enriched with playthings changed daily. In 14 of 16 repetitions of this basic experiment, rats in the enriched environment developed significantly more cerebral cortex (relative to the rest of the brain's tissue) than did those in the impoverished environment.

Such results have motivated improvements in environments for laboratory, farm, and zoo animals—and for children in institutions. Stimulation by touch or massage also benefits infant rats and premature babies (Field et al., 2007). “Handled” infants of both species develop faster neurologically and gain weight more rapidly. By giving preemies massage therapy, neonatal intensive care units now help them to go home sooner (Field et al., 2006).

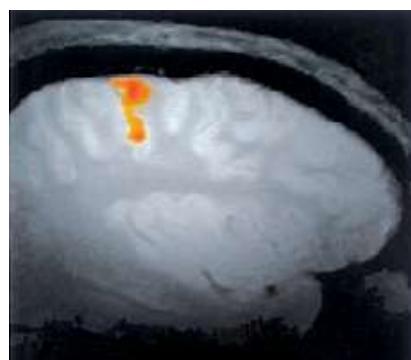
Both nature and nurture sculpt our synapses. After brain maturation provides us with an abundance of neural connections, our experiences trigger a pruning process. Sights and smells, touches and tugs activate and strengthen connections. Unused neural pathways weaken. Like forest pathways, popular tracks are broadened and less-traveled ones gradually disappear. The result by puberty is a massive loss of unemployed connections.

Here at the juncture of nurture and nature is the biological reality of early childhood learning. During early childhood—while excess connections are still on call—youngsters can most easily master such skills as the grammar and accent of another language. Lacking any exposure to language before adolescence, a person will never master any language (see Module 36). Likewise, lacking visual experience during the early years, those whose vision is restored by cataract removal never achieve normal perceptions (see Module 19). The brain cells normally assigned to vision have died or been diverted to other uses. The maturing brain’s rule: Use it or lose it.

Although normal stimulation during the early years is critical, the brain’s development does not end with childhood. As we saw in Module 12’s discussion of brain plasticity, our neural tissue is ever changing and new neurons are born. If a monkey pushes a lever with the same finger several thousand times a day, brain tissue controlling that finger changes to reflect the experience. Human brains work similarly (**FIGURE 50.2**). Whether learning to keyboard or skateboard, we perform with increasing skill as our brain incorporates the learning (Ambrose, 2010).

“Genes and experiences are just two ways of doing the same thing—wiring synapses.” -JOSEPH LEDOUX, *THE SYNAPTIC SELF*, 2002

Both photos courtesy of Avi Karni and Leslie Ungerleider,
National Institute of Mental Health

**Figure 50.2**

A trained brain A well-learned fingertapping task activates more motor cortex neurons (orange area, right) than were active in the same brain before training (left). (From Karni et al., 1998.)



"To be frank, officer, my parents never set boundaries."

FYI

Even among chimpanzees, when one infant is hurt by another, the victim's mother will often attack the offender's mother (Goodall, 1968).



"So I blame you for everything—whose fault is that?"

"If you want to blame your parents for your own adult problems, you are entitled to blame the genes they gave you, but you are not entitled—by any facts I know—to blame the way they treated you. . . . We are not prisoners of our past." —MARTIN SELIGMAN, *WHAT YOU CAN CHANGE AND WHAT YOU CAN'T*, 1994

How Much Credit or Blame Do Parents Deserve?

50-2

In what ways do parents and peers shape children's development?

In procreation, a woman and a man shuffle their gene decks and deal a life-forming hand to their child-to-be, who is then subjected to countless influences beyond their control. Parents, nonetheless, feel enormous satisfaction in their children's successes, and feel guilt or shame over their failures. They proudly display their "my child is on the honor roll" bumper sticker. And they wonder where they went wrong with the teenager who is repeatedly suspended from school. Freudian psychiatry and psychology have been among the sources of such ideas, by blaming problems from asthma to schizophrenia on "bad mothering." Society has reinforced such parent blaming: Believing that parents shape their offspring as a potter molds clay, people readily praise parents for their children's virtues and blame them for their children's vices. Popular culture endlessly proclaims the psychological harm toxic parents inflict on their fragile children. No wonder having and raising children can seem so risky.

But do parents really produce future adults with an inner wounded child by being (take your pick from the toxic-parenting lists) overbearing—or uninvolved? Pushy—or ineffectual? Overprotective—or distant? Are children really so easily wounded? If so, should we then blame our parents for our failings, and ourselves for our children's failings? Or does talk of wounding fragile children through normal parental mistakes trivialize the brutality of real abuse?

Parents do matter. The power of parenting is clearest at the extremes: the abused children who become abusive, the neglected who become neglectful, the loved but firmly handled who become self-confident and socially competent. The power of the family environment also appears in the remarkable academic and vocational successes of children of people who fled from Vietnam and Cambodia—successes attributed to close-knit, supportive, even demanding families (Caplan et al., 1992).

Yet in personality measures, shared environmental influences from the womb onward typically account for less than 10 percent of children's differences. In the words of behavior geneticists Robert Plomin and Denise Daniels (1987; Plomin, 2011), "Two children in the same family are [apart from their shared genes] as different from one another as are pairs of children selected randomly from the population." To developmental psychologist Sandra Scarr (1993), this implied that "parents should be given less credit for kids who turn out great and blamed less for kids who don't." Knowing children are not easily sculpted by parental nurture, perhaps parents can relax a bit more and love their children for who they are.

Peer Influence

As children mature, what other experiences do the work of nurturing? At all ages, but especially during childhood and adolescence, we seek to fit in with our groups and are influenced by them (Harris, 1998, 2000):

- Preschoolers who disdain a certain food often will eat that food if put at a table with a group of children who like it.
- Children who hear English spoken with one accent at home and another in the neighborhood and at school will invariably adopt the accent of their peers, not their parents. Accents (and slang) reflect culture, "and children get their culture from their peers," notes Judith Rich Harris (2007).

- Teens who start smoking typically have friends who model smoking, suggest its pleasures, and offer cigarettes (J. S. Rose et al., 1999; R. J. Rose et al., 2003). Part of this peer similarity may result from a *selection effect*, as kids seek out peers with similar attitudes and interests. Those who smoke (or don't) may select as friends those who also smoke (or don't).

Howard Gardner (1998) has concluded that parents and peers are complementary:

Parents are more important when it comes to education, discipline, responsibility, orderliness, charitableness, and ways of interacting with authority figures. Peers are more important for learning cooperation, for finding the road to popularity, for inventing styles of interaction among people of the same age. Youngsters may find their peers more interesting, but they will look to their parents when contemplating their own futures. Moreover, parents [often] choose the neighborhoods and schools that supply the peers.

This power to select a child's neighborhood and schools gives parents an ability to influence the culture that shapes the child's peer group. And because neighborhood influences matter, parents may want to become involved in intervention programs that aim at a whole school or neighborhood. If the vapors of a toxic climate are seeping into a child's life, that climate—not just the child—needs reforming. Even so, peers are but one medium of cultural influence. As a purported African proverb declares, and former U.S. Secretary of State Hillary Clinton has popularized, "It takes a village to raise a child."

"Men resemble the times more than they resemble their fathers."
-ANCIENT ARAB PROVERB



Allan Shoemaker/Getty Images

Peer power As we develop, we play, date, and partner with peers. No wonder children and youths are so sensitive and responsive to peer influences.

Before You Move On

► ASK YOURSELF

To what extent, and in what ways, have your peers and your parents helped shape who you are?

► TEST YOURSELF

To predict whether a teenager smokes, ask how many of the teen's friends smoke. One explanation for this correlation is peer influence. What's another?

Answers to the Test Yourself questions can be found in Appendix E at the end of the book.

Module 50 Review

50-1 How do early experiences modify the brain?

- As a child's brain develops, neural connections grow more numerous and complex. Experiences then trigger a pruning process, in which unused connections weaken and heavily used ones strengthen.
- Early childhood is an important period for shaping the brain, but throughout our lives our brain modifies itself in response to our learning.

50-2 In what ways do parents and peers shape children's development?

- Parents influence their children in areas such as manners and political and religious beliefs, but not in other areas, such as personality.
- As children attempt to fit in with their peers, they tend to adopt their culture—styles, accents, slang, attitudes.
- By choosing their children's neighborhoods and schools, parents exert some influence over peer group culture.

Multiple-Choice Questions

- According to Plomin and Daniels, "Two children in the same family are [apart from their shared genes] as different from _____ as are pairs of children selected randomly from the population."
 - their parents
 - their grandparents
 - their friends
 - one another
 - their cousins
- Compared with rats raised in an enriched environment, which of the following is true of rats raised in isolation?
 - Their brain cortex is less developed.
 - Though neurologically similar, they fear other rats.
 - Their brains have more connections.
 - They have a thicker brain cortex.
 - The differences between the two groups are not statistically significant.

- What is the *primary* means by which parents influence the behavior of their children?

- Parenting style
- Genetic contributions
- Prenatal environment
- Teaching cooperation
- Rewarding achievement

- Neurologically, what is the function of pruning?

- Pruning creates new connections between synapses through repeated experiences.
- Pruning reduces the negative effects of teratogens by eliminating neural waste.
- Pruning increases the weight of the brain through enriching experiences.
- Pruning creates areas in the brain used in learning mathematics.
- Pruning eliminates unused neural pathways.

Practice FRQs

- Compare and contrast the influence parents and peers have on a child's development, giving one example for each.

Answer

2 points: Parents influence a child's (1) quality of life, (2) attachments and beliefs, (3) exposure to peer culture via neighborhood and schools.

2 points: Peers influence a child's (1) tastes and styles, (2) accents and slang, and (3) substance use.

- Provide two examples of how children seek to fit in with their groups and are influenced by them.

(2 points)