Social and Emotional Development in Infancy and Toddlerhood

T/F Test Your Knowledge

Test your knowledge of child development by deciding whether each of the following statements is true or false, and then check your answers as you read the chapter.

1. T □ F □ Emotions are universal, so people all over the world understand each other’s emotional expressions.
2. T □ F □ When a young boy in the United States is hurt, he may express what he is feeling as anger, not sadness.
3. T □ F □ Infants are too young to have empathy for the feelings of others.
4. T □ F □ When babies cry because a parent has left, it is evidence that they are too attached to their parents.
5. T □ F □ Mothers must have immediate contact with their babies after they are born if a secure attachment is to be formed.
6. T □ F □ If a child has developed an insecure attachment to a parent, that child can still become securely attached later in her life.
7. T □ F □ Infants are too young to be affected by parental divorce.
8. T □ F □ Most adopted children are adopted as infants.
9. T □ F □ Most mothers of infants and toddlers who work outside the home do so out of necessity.
10. T □ F □ Infants are not capable of forming relationships with other children before the age of 2.

Correct answers: (1) T (2) F (3) F (4) F (5) T (6) F (7) F (8) F (9) T (10) F
Infants enter the world with a basic repertoire of emotions that lets them communicate what they are feeling. They are also born with a characteristic way of responding to their experiences that we call temperament. At first the infant does not feel separate from his caregiver, but early in development he begins to distinguish the self from the other. From their earliest days of life, infants are primed to form social relationships with those who care for them. We saw in Chapter 5 that newborns quickly begin to look at faces, recognize their mother’s voice, and prefer her scent, the beginnings of a relationship that will last a lifetime. In this chapter, we learn more about how infants’ social world develops. We examine the attachments infants develop to the important caregivers in their lives and the important role families, culture, and peers play in their social and emotional development.

**Emotions: Universality and Difference**

Are you usually a pleasant and positive person, or do you struggle with feelings of sadness? Are you easily frightened, or are you unflappable? Are you calm and easygoing, or are you readily provoked to anger? In this section, we discuss both the biological underpinnings and the environmental influences that shape our expression, experience, and interpretation of emotions. We also talk about how temperament influences the way infants react to experiences and how they begin to learn how to control and regulate their emotional response to events.

**What Is Emotion?**

When you are sitting in a scary movie, you may experience a rapid heartbeat and a sense of tension, you may grip the arm of your friend next to you, and you may actually jump when the hidden menace leaps out at you. This experience of fear includes your body's physiological reaction, your interpretation of the situation, communication with another person, and your own actions, which are all parts of what we call emotion. We all experience a range of emotions, from happy to sad, angry to afraid, and embarrassed to disgusted.

One way to understand the role of emotions in communication is to look at situations in which emotions are absent. See **Active Learning: Why We Use Emoticons** to recognize problems that arise when our electronic communication lacks emotional expression and the ways people have tried to solve these difficulties. You will also learn about some cultural differences in the expression of emotions.

**Active Learning**

**Why We Use Emoticons**

Have you ever had an online conversation with someone only to realize later that you misunderstood what she really meant to say? If someone writes, “I want to see you,” how do you interpret that? Is this person saying she longs to see you, or is she preparing to scold you? In 1982, Scott Fahlman, a professor of computer science at Carnegie
Mellon University, sent the first emoticon, designed to add emotions to online communication. He wrote, “I propose the following character sequence for joke markers: :-)” (Lovering, 2007, p. E2). These markers were meant to distinguish sarcastic or silly comments from serious ones, because people were badly misunderstanding each other, going as far as to interpret jokes as real safety warnings (Fahlman, n.d.). Using emoticons, you would read “I want to see you :-)” very differently from “I want to see you >:-(”. Emotions are necessary to make sure our meaning is communicated clearly.

You may not know that other cultures have their own emoticons, which you might not recognize. Western-style emoticons typically are written so that you need to tip your head to the left to see them. East Asian emoticons appear right-side up. Emoticons also reflect cultural differences in the way individuals understand other people’s emotions. For example, when trying to interpret photographs of faces expressing different emotions, Westerners tend to scan the whole face, while East Asians focus on the eyes (Jack, Blais, Scheepers, Schyns, & Caldara, 2009). This difference is apparent when we compare emoticons used in these two cultures:

<table>
<thead>
<tr>
<th>East/West Differences in Emoticons</th>
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<tbody>
<tr>
<td><strong>Emotion</strong></td>
</tr>
<tr>
<td>Happy</td>
</tr>
<tr>
<td>Sad</td>
</tr>
<tr>
<td>Surprised</td>
</tr>
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</table>

Can you identify the emotions expressed by these emoticons used in East Asia?

(a) ☆⌒(>。≪) (b) –(へ–) (c) (>^_^)> ( ;_;) <(^_^<) (d) ポッ(゚.゚) (゚.゚)ポッ

Answer: (a) getting hurt/experiencing pain; (b) complaint/discontent; (c) offering a hug to a person who is crying; (d) love.

Because emotions have a physiological component, we might expect them to be rooted in our biology and thus to be similar among human beings of all cultural backgrounds. In fact, there is remarkable similarity around the world in the display and understanding of facial expressions that indicate basic emotions: happiness, sadness, fear, anger, interest, and disgust (Izard, 2007; Oatley, Keltner, & Jenkins, 2006). In addition, there is some evidence for the universality of more complex emotions, such as pride (Tracy & Robins, 2008). The argument has been made that basic emotions are automatic and unlearned because all infants demonstrate these basic emotions, and particular neural systems in the brain are at least partially dedicated to the expression of each of these emotions (Izard, 2007). Prevalence of these emotions has also been found to change over the course of the first year, with positive affect such as happiness increasing, fear decreasing, and frustration (anger) increasing (Rothbart, Derryberry, & Hershey, 2000).

Although some aspects of emotional expression appear to be universal, there is also considerable evidence that the way we display our own emotions and understand those shown by others is mediated in part by our culture, language, gender, temperament, and personality (Izard, 2007; Kayyal & Russell, 2013; Matsumoto, 1992, 2006; Matsumoto & Assar, 1992; Russell, 1994). Although our basic emotions appear to be biologically determined, we quickly develop ways of thinking about emotions, called

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**T/F #1**

Emotions are universal, so people all over the world understand each other’s emotional expressions. **False**
emotion schemas, that affect the way we experience and show emotions (Izard, 2007). You'll remember that a schema is a cognitive framework that organizes the world into categories and associations. When we experience sadness, we draw on a wealth of associations and memories to understand what we are feeling. We label the experience, connect it to our memory of other experiences when we felt sad, and judge whether our expression of sadness is allowable or appropriate, especially in front of other people.

For example, the idea that “big boys don’t cry” is a powerful control on the expression of sadness for many boys and may make it difficult for them to get help or even to understand their own sad feelings. A boy in the United States who is hit by a baseball may automatically begin to cry, but if his schema for crying includes “big boys don’t cry,” he decides “I cannot let myself cry,” and his facial expression may then reflect anger at himself for experiencing this forbidden emotion. Sadness is then often expressed as anger, which is more acceptable for boys in the American culture. Matsumoto, Consolacion, and Yamada (2002) reported that people in individualistic cultures, such as the United States, show their feelings more openly than do people from collectivist cultures, such as Japan. Knowing this, a Japanese person interprets someone’s small smile as indicating great happiness, while an American interprets a broad grin as moderate happiness.

**Social Referencing**

When we experience emotions, they produce various physiological effects on our body, but what does it mean to you when your heart races or you find yourself shaking and trembling? One way we begin to understand how to label our emotions is to look at the way others are reacting when we are uncertain about how we should react, a process called social referencing. Social referencing first develops between 9 and 12 months of age (Hennighausen & Lyons-Ruth, 2005). You may have seen a toddler fall and immediately look around for his parent. If his father gasps and runs over with fear on his face, the child is likely to begin crying. However, if his dad smiles and says, “You’re OK” (if the child really isn’t hurt), the toddler is likely to pick himself up and return to play. The child is learning to interpret his feeling of mild upset as either something that is very frightening or a slight bump that he can manage and overcome. Of course, any child who is truly hurt will cry and needs comfort.
Empathy

In addition to checking with other people for clues about their emotional expression, infants and toddlers have a natural tendency to share other people’s feelings, which is the essence of empathy. As we saw in Chapter 5, from their first days of life, infants imitate the actions of others. The same is true for emotions. If a baby hears another baby crying, he is quite likely to start crying himself (Geangu, Benga, Stahl, & Striano, 2010). Have you experienced something similar yourself? When you see someone crying on television or a movie, do you ever find your own eyes getting wet? Experiencing the feelings of others is a form of empathy and is the basis for much human interaction. When we experience another’s distress, we are more likely to try to show sympathy by helping or comforting that person. See how toddlers express empathy by completing Active Learning: Empathy and Sympathy.

Active Learning

Empathy and Sympathy

You can carry out the following experiment designed by Carolyn Zahn-Waxler and her colleagues to look at empathy and sympathy in toddlers (for more information, see Robinson, Zahn-Waxler, & Emde, 1994). When you are with a child you know, pretend to hurt yourself. You can pretend to pinch your finger in a drawer, stub your toe, or experience some other noticeable but minor hurt. Practice beforehand so you can react in a realistic way.

How does the child respond? Young children may ignore you, laugh, look hurt, or cry themselves, or show sympathy by asking whether you are OK or need a Band-Aid. Think about what each type of behavior means regarding the child’s ability to take another’s point of view as well as empathizing with another’s pain. As children get older, they move from showing personal distress when they empathize with you (for example, crying themselves) to being more oriented to your feelings and helping you feel better.

After you note the child’s reaction, be sure to reassure the child that you now are feeling much better and do not hurt anymore. Also thank the child if he or she tried to help you.

Temperament

Although most of us will be frightened when we see a horror film, some people will be so terrified that they will never go to see another film like that again, while others will be scared but also excited by it and will take every opportunity to see more. Temperament is the general way in which we respond to experiences in the world, whether seeing horror films, doing a class presentation, or being cut off in traffic. Although different experiences evoke different emotional responses, the concept of temperament implies that individuals have a general emotional style that guides their tendency to respond in certain ways to a variety of events in their environment. Some people are usually timid, fearful, and anxious; some are fearless and outgoing; and others are often aggressive and angry.

Some of these differences reflect characteristic ways we have learned to respond to our experiences, but parents report that their children were different from each other from the moment they were born; one
child was quiet while the other was boisterous, or one was demanding while the other was content. There is some evidence that they are right, that we are born with a certain temperament based to some degree on our genetic inheritance (Goldsmith, Lemery, Aksan, & Buss, 2000; Rothbart, 2007).

Among the several different approaches to describing and measuring temperament (Strelau, 1998), one of the most influential was developed by Alexander Thomas and Stella Chess (Chess & Thomas, 1999; Thomas & Chess, 1977). Based on semistructured interviews with parents, Thomas and Chess identified nine characteristics that contribute to the infant’s temperament. These are activity level, adaptability, approach or withdrawal, attention span and persistence, distractibility, intensity of reaction, quality of mood, rhythmicity (or regularity), and threshold of responsiveness. Any individual infant can score high, low, or average on each of these characteristics, and combining this information produces three temperament profiles: an easy temperament, a difficult temperament, and a slow-to-warm temperament. Table 7.1 shows where infants with each of these temperament profiles fall on each of these dimensions.

Infants with an easy temperament have a generally positive mood, adapt fairly easily to change, and are regular and predictable in their patterns of eating, sleeping, and elimination (Chess & Thomas, 1999). In contrast, infants with a difficult temperament have a more negative mood, are easily frustrated and slow to adapt to change, and have irregular patterns of eating, sleeping, and elimination. Infants with difficult temperaments also tend to react more intensely to situations than those with easy temperaments. For these children, it is even more important that parents try to keep their environments regular and predictable and introduce changes gradually. The third temperament described by Chess and Thomas (1999) is the slow-to-warm temperament. The reaction of these infants to new experiences is milder than the reaction of a difficult child, whether they are exposed to something they like or something they dislike. However, if they are given some time and are not pressured by adults, with repeated exposure to the new experience they gradually come around on their own. Slow-to-warm infants also are less irregular in their eating, sleeping, and elimination patterns than difficult infants but less regular than easy infants.

### TABLE 7.1 Temperament profiles

<table>
<thead>
<tr>
<th>Dimension of temperament</th>
<th>Easy</th>
<th>Slow to warm</th>
<th>Difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Level</td>
<td>Varies</td>
<td>Low to moderate</td>
<td>Varies</td>
</tr>
<tr>
<td>Adaptability</td>
<td>Very adaptable</td>
<td>Slowly adaptable</td>
<td>Slowly adaptable</td>
</tr>
<tr>
<td>Approach/Withdrawal</td>
<td>Positive approach</td>
<td>Initial withdrawal</td>
<td>Withdrawal</td>
</tr>
<tr>
<td>Attention Span and Persistence</td>
<td>High or low</td>
<td>High or low</td>
<td>High or low</td>
</tr>
<tr>
<td>Distractibility</td>
<td>Varies</td>
<td>Varies</td>
<td>Varies</td>
</tr>
<tr>
<td>Intensity of Reaction</td>
<td>Low or mild</td>
<td>Mild</td>
<td>Intense</td>
</tr>
<tr>
<td>Quality of Mood</td>
<td>Positive</td>
<td>Slightly negative</td>
<td>Negative</td>
</tr>
<tr>
<td>Rhythmicity</td>
<td>Very regular</td>
<td>Varies</td>
<td>Irregular</td>
</tr>
<tr>
<td>Threshold of Responsiveness</td>
<td>High or low</td>
<td>High or low</td>
<td>High or low</td>
</tr>
</tbody>
</table>

This table shows where infants who are classified by Thomas and Chess as easy, slow-to-warm, or difficult fall on each of the nine dimensions of temperament they describe. Note that about 35% of infants show a mixture of traits that do not fit any of the profiles.

**SOURCE:** Adapted from Chess, Thomas, & Birch (1965).
In their early studies of children’s temperament, Thomas and Chess (1977) found that easy infants made up about 40% of their sample, difficult infants made up 10%, and slow-to-warm infants made up about 15%. The remainder could not be classified because they displayed the 9 characteristics in a different configuration or were not consistent in the type of behaviors they showed from one occasion to another. According to Chess and Thomas (1999), what is most important in shaping the consequences of having one type of temperament versus another is the goodness of fit between the child’s characteristics and the demands of the environment. For instance, if an infant doesn’t like a lot of noise and crowds of people, a sensitive parent tries to avoid these situations or plans to take the infant into these situations only when she is well rested, fed, and comfortable (Sturm, 2004).

The question whether the temperament with which we are born remains the basis for our emotional responses for the rest of our lives is a complicated one. Research shows a tendency for many children to maintain the same temperament over time (Carranza, Gonzalez-Salinas, & Ato, 2013; Casalin, Luyten, Vliegen, & Neurs, 2012; Neppl et al., 2010; Rothbart et al., 2000). However, there also are many children who change. Although they do not tend to go from one extreme to another, smaller changes do occur (Goldsmith et al., 2000; Carranza et al., 2013). Think about your own temperament. If you are shy now, were you also shy as a child? If you are outgoing now, have you been told you were very friendly as a child? Were you shy until a certain age and then you changed to become more outgoing? In recent years, Mary Rothbart and her colleagues have added to the work by Chess and Thomas with rigorous analyses of parent questionnaires about children’s temperament (Rothbart, Ahadi, Hershey, & Fisher, 2001). They have examined two basic aspects of temperament: (1) involuntary reactivity to external events, including emotional, motor, and attentional reactivity; and (2) ability to self-regulate reactions. To learn more about Rothbart’s approach and apply it to your own understanding of your temperament, interview your parents as suggested in Active Learning: Temperament.

Goodness of fit. How well a child’s temperamental characteristics match the demands of the child’s environment.

Temperament. Children’s temperament ranges from shy and retiring to outgoing and adventurous, and where a child falls on this continuum influences how that child interprets new experiences. Where would you place yourself? Have you always been that way?
Active Learning

Temperament

Mary Rothbart and her colleagues developed some different ideas about the dimensions of temperament than those of Chess and Thomas. In their research, they found three basic dimensions: (1) extraversion, (2) negative emotion, and (3) self-control (Rothbart et al., 2001). Use these dimensions to interview your parents about what you were like as a young child. Ask your parents how similar you were to the following characteristics from the Children’s Behavior Questionnaire for each dimension (Rothbart et al., 2001):

Extraversion: “Usually rushes into an activity without thinking about it”; “Gets so worked up before an exciting event that s/he has trouble sitting still.”

Negative emotion: “Has temper tantrums when s/he doesn’t get what s/he wants”; “Has a hard time settling down for a nap.”

Self-control: “Can lower his/her voice when asked to do so”; “When picking up toys or other jobs, usually keeps at the task until it’s done.” (p. 1406)

Did you respond quickly to experiences, like grabbing an object you wanted right away, or did you move slowly into new situations? Were you able to calm yourself down when upset or angry? Do you feel that your parents’ descriptions of you as a child still describe you now in any way? If you feel your temperament has undergone some significant change, can you identify anything that initiated that change (for instance, becoming more outgoing after you had to move to a new school and make new friends)? These indicators of temperament seem to stay the same for most people, but they can change if experiences provide the impetus for those changes.

Emotional Self-Regulation in Infants and Toddlers

When children (and adults) can control the expression of their emotions, they are more likely to be able to use emotions in a positive way. One example of an adult who is not in control of his emotions is a person who experiences road rage. This person may chase after someone who has cut him off in traffic, putting himself and others at risk. In children, we see a similar inability to control rage in the form of a temper tantrum.

Regulating emotions. A driver in the throes of road rage looks a great deal like a young child having a temper tantrum. In both cases, the individual has failed to regulate and control their negative emotions.
Infants have little self-control and have difficulty regulating their emotional reactions. As adults, we recognize and accept this. For example, when they begin to cry, they may cry harder and harder, stressing their body’s resources. They rely on parents to help control and modulate these feelings. A special relationship forms with the parent as the parent learns to comfort the child effectively. However, even young infants make some effort to exercise self-control. Early in development they begin to develop ways to soothe themselves through behaviors such as thumb sucking, holding a favorite “blankie,” or avoiding a feared or frustrating object by looking away (Eisenberg, Hofer, & Vaughan, 2007). They may also signal in a subtle way when they are being overstimulated. If you are playing with an infant who suddenly yawns, stretches, and turns away, the infant is letting you know he is feeling overwhelmed and you need to reduce the amount of stimulation he is trying to process. Being sensitive to the infant’s signals—whether of hunger, tiredness, or discomfort—helps the infant learn to regulate his own emotions because he comes to know he doesn’t need to get frantic to get a response from his caregivers.

As children become toddlers, the important adults in their lives continue to be powerful models of ways to regulate and control emotions and behaviors. If parents react to their own frustrations with negative outbursts, toddlers learn that such behavior is acceptable. When parents are angry or become frustrated but stop for a minute to regain their composure, this models exercising self-control rather than behaving impulsively for their children.

Another way parents help infants develop self-control is providing an environment with predictable routines. Parents don’t need to be rigid about this, but regular times for meals, sleep, and play help keep an infant from becoming overly hungry, tired, or bored. You know from your own experience that it is more difficult to exercise self-control when you are feeling very tired or hungry, and the same is true for infants.

Parents and other caregivers can also help redirect their child’s behavior. For instance, if a toddler bites someone in frustration, parents can give him an alternative behavior to express his feelings. People who work with young children know that biting at this age is not unusual, and you frequently hear them saying “Use your words” to remind children they can express their frustration in other more acceptable ways. As children develop conversational skills, their struggles over possessions decline in frequency (Hay, 2006).

Check Your Understanding

1. What is emotion?
2. What is temperament?
3. What categories of temperament have been identified in infants?
4. How do infants learn to control their emotions?

The Self in Infants and Toddlers

What conception of self is present when we are born? Psychoanalyst Margaret Mahler argued that infants are not born with a sense that they have a self that is separate from those who take care of them (Mahler, Pine, & Bergman, 1975). Babies must develop this sense, and they appear to do it in two stages. The first understanding of self is based on the infant’s growing ability to make things happen: “I make this mobile move” or “I make my mommy smile.” The baby’s intention to make things happen reflects her awareness that she is the agent of change. Rochat (2001) has proposed that this first understanding then leads to a new concept of “me” when the child can begin to think about herself. Self-awareness means the child is the object of her own perceptions and thoughts (Gallup, Anderson, & Shillito, 2002). This second type of awareness begins to develop in the second year of life.

We describe four ways in which this new sense of self is expressed: mirror self-recognition, use of the pronouns I and you, visual perspective taking, and possessiveness. All
four develop at about the same time, somewhere near the child’s second birthday (Rochat, 2001; Stipek, Gralinski, & Kopp, 1990).

**Mirror Self-Recognition**

The classic experiment establishing whether a toddler has physical self-awareness is the mirror self-recognition task. In this task, the toddler’s parent pretends to wipe the toddler’s nose but secretly puts rouge or lipstick on the tissue and marks the child’s nose with it. The child is then placed in front of a mirror. If she realizes the image in the mirror is really herself and not another child, she will touch her own nose when she sees the funny red mark on it. At 1 year of age children will not do this. Instead they react as if their mirror image were another child with whom they can interact. Sometime between 18 and 24 months, children in Western societies understand that the mirror image is a reflection of themselves, and they begin touching their own nose (Broesch, Callaghan, Henrich, Murphy, & Rochat, 2011; Gallup et al., 2002).

**Use of Pronouns**

You may hear toddlers say something like “Daddy, pick you up, pick you up!” when what they mean is “Daddy, pick me up!” Using I and you appropriately is not something we can learn by imitation. The child only hears Daddy say, “I’ll pick you up,” so he imitates what he hears. Only when he understands that I is different from you does he become able to use the pronouns correctly and say “Pick me up!” Toddlers develop this ability several months before or after their second birthday. Before this time, many resort to the strategy of referring to themselves by name—for example, “Ethan do it!” (Bates, 1990). Infants begin to use personal pronouns like my and mine between the ages of 15 and 18 months (Saylor, Ganea, & Vazquez, 2011). Those as young as 12 months of age can correctly retrieve an object an experimenter has played with when asked to give the experimenter my ball (Saylor et al., 2011).

**Visual Perspective-Taking**

If you ask a toddler to show you her drawing, she may hold it up so she can see it but you cannot. She assumes that because she can see it, you must be able to see it as well. The child must develop an understanding that you and she are separate people with different points of view to develop what is called **visual perspective-taking**. This ability develops in toddlers between 18 and 24 months of age (Moll & Tomasello, 2006). Ricard, Girouard, and Gouin Décairie (1999) found it was linked with the ability to use I and you correctly as described above.

**Possessiveness**

Two-year-olds are entering what Erik Erikson (1963) referred to as the stage of **autonomy versus shame and doubt**. Being “autonomous” means you are independent and have some control over what happens to you. Toddlers assert their autonomy, or separation of self from others, through two of their favorite commands: “No!” and “Mine!”

As they develop a clearer sense of themselves as separate from those around them, toddlers are motivated to defend their own way of doing things and what they think belongs to them. In one study, Levine (1983) found that 2-year-old boys who recognized themselves in a mirror and were able to understand and use I and you accurately were more likely than those with a less clear self-concept to claim toys when interacting with...
Part III
Infancy and Toddlerhood

Caregivers who deal with toddlers should see this toy-claiming not as selfishness but as a first expression of the child’s understanding that “I have a self that is different from yours.” Hay (2006) found that toddlers who used possessives when interacting with a peer were more aggressive initially, but 6 months later they were more likely to share with a peer.

Toddlers who have a clearer sense of self are better able to play successfully with peers (Hay, 2006; Levine, 1983). Girls who have a clearer sense of self will try to create a sense of similarity when interacting with an unfamiliar peer by playing with the same type of toy (Levine & Conway, 2010). At this point, toddlers begin to imitate each other (Asendorpf & Baudonniere, 1993), and they can work together with a peer to solve a problem. For example, in one study two toddlers were shown a clear box containing toys. The only way to retrieve the toys was for one child to press a lever while the other took the toys out of the box. One child could not physically do it alone. Toddlers who had shown a clearer sense of self-other differentiation were better able to coordinate with their partner to retrieve the toys successfully (Brownell & Carriger, 1990).

Check Your Understanding
1. What is mirror self-recognition?
2. What is the significance of a toddler’s use of personal pronouns?
3. What is visual perspective taking?
4. How does possessiveness demonstrate the toddler’s growing sense of self?

Attachment

Love is one of the most important and formative of emotions. The first love we develop is for those who care for us, usually our parents. The love in this relationship consists of an emotional bond, known as attachment, which is central to the well-being of infants and children as they grow. In this section, we look at how attachment develops, how it differs from person to person, and what its consequences are. Before continuing, try Active Learning: Experiencing a Sense of Secure Attachment.

Active Learning

Experiencing a Sense of Secure Attachment

In a quiet place, close your eyes and relax for a brief time. Keeping your eyes closed, try to remember a time in your life when you felt cared for, secure, and loved. If you are able to bring forth a memory, stay with it for a few minutes. Experience that feeling. Who are you with in this memory? What is happening? Now slowly open your eyes and return to the present. Reflect on your experience. How did you feel? Was there one person in particular who helped you feel that way? This activity is designed to elicit feelings connected with the experience of emotional attachment. These are feeling-memories that we may call on in times of stress. This exercise is not necessarily an easy one to do, so do not be alarmed if you were not able to call forth a memory.

Secure attachment is a strong, positive emotional bond with a particular person who provided comfort and a sense of security. If you are attached to someone, you are more
likely to turn to that person when you are distressed. You are usually happy to see that person and may be unhappy about separations. This is a person with whom you can feel free to be yourself in the fullest sense. Although we talk quite a bit about the development of attachment in infants, attachment remains central to our well-being throughout our lives.

Journey of Research: The History of the Study of Attachment gives you more information about how our thinking about the roots of attachment has changed over the years.

JOURNEY OF RESEARCH The History of the Study of Attachment

In the early to mid-1900s, both psychoanalytic and behavioral theorists developed ideas about how the bond between child and parent is formed. Both theories of attachment were based on the idea of drive reduction—that is, that human behavior is motivated by the need to satisfy basic needs, such as hunger. When we feel hungry, we are driven to seek out food, and our drive is reduced when we eat. In both theories, the development of a child’s attachment to his mother is based on the mother’s ability to satisfy such drives. Specifically, as the mother provides food to satisfy the infant’s hunger drive, the infant learns to associate his sense of satisfaction, or drive reduction, with her presence and as a result develops an attachment to her.

In the 1950s, new ideas about the nature of attachment appeared. In 1958, Harry Harlow published an article titled “The Nature of Love,” in which he reported the results of his research with macaque monkeys. To test his ideas about how attachment forms, Harlow separated infant monkeys from their mothers at birth and raised them with two surrogate mothers. One “mother” was a wire mesh tube, and the other was a wooden tube covered in sponge rubber with terry cloth wrapped around it so it would be comfortable to touch. Half the monkeys were fed from a bottle protruding from the wire mother, and half were fed from the cloth mother.

Harlow found that infant monkeys spent the majority of their time clinging to the cloth mother regardless of which surrogate mother provided milk. When the infant monkeys were frightened by a loud, moving toy, they were more likely to run to the cloth mother for security. When they were placed in a new, unknown setting, they again preferred to cling to the cloth mother and eventually were able to explore the room, using it as a safe base to return to when they became frightened. When the cloth mother was absent, the babies were distressed and unable to explore the environment or play. Harlow came to believe that the primary function of nursing a baby might actually be to provide contact comfort with the mother, and that this contact comfort created the mother-infant attachment, not feeding as the behaviorists and psychoanalysts believed.

Drive reduction The idea that human behavior is determined by the motivation to satisfy or reduce the discomfort caused by biological needs or drives.
At about the same time, John Bowlby, a child psychiatrist trained in psychoanalysis, was exploring his observation that separations from parents had an enormous impact on the psychological well-being of children seen in a psychiatric clinic (Ainsworth & Bowlby, 1989). Bowlby believed Harlow’s research with monkeys confirmed his suspicions that a psychoanalytic explanation for attachment was not adequate.

Bowlby also was intrigued by a new theory based on the observation of natural behavior of animals. Remember from Chapter 2 that Konrad Lorenz’s theory of ethology proposed that genes produce certain behaviors, and that if these behaviors help the animals adapt successfully to their environment, the genes that produce them will be handed down from one generation to the next. In 1958, Bowlby set forth his new theory of attachment based on ethology. He argued that attachment is a biologically based, active behavior related to the infant’s need for protection in order to survive. Bowlby believed infant behaviors such as crying, smiling, sucking, clinging, and following are adaptive behaviors that promote the survival of the child by helping develop attachment between mother and child.

In what ways is attachment adaptive? First, because infants are dependent on an adult caregiver to provide all the things that keep them alive, it makes sense biologically that they would have built-in behaviors designed to keep that adult near. A baby who feels threatened, whether by a scary noise or uncomfortable hunger pains, will act to keep the parent, or caregiver, close. Crying, smiling, and following all serve this purpose. Second, when infants feel secure, they are able to explore their environment, checking back from time to time with a parent as a form of “emotional refueling,” like a car that runs out of gas and needs to be filled up to continue on its travels (Mahler, Bergman, & Pine, 2000, p. 69). The child uses the parent as a secure base for exploration, and because exploration is essential for human learning, these behaviors are adaptive.

In 1950, Mary Ainsworth joined Bowlby’s research team (Ainsworth & Bowlby, 1989). Ainsworth was interested in assessing and classifying different types of emotional security. When she moved from England to Uganda in 1954, she began her research by observing mothers and their infants. These and subsequent observations led to the classification of four categories of attachment: secure attachment, anxious avoidant attachment, anxious ambivalent/resistant attachment, and disorganized/disoriented attachment (described in the text below). The basic theory outlined by Bowlby and Ainsworth remains the underlying model for most of the work on attachment being done today.

### The Development of Attachment: Bowlby’s Stages

As John Bowlby (1969) brought new ideas from Harlow’s research and from ethological theory into his research on attachment, he described the following four stages in the early development of attachment:

1. **Preattachment** (birth to 6 weeks)
2. **Attachment in the making** (6 weeks to 6–8 months)
3. **Clear-cut attachment** (6–8 months to 18 months–2 years)
4. **Goal-corrected partnership** (also referred to as the formation of reciprocal relationships; 18 months on) (Ainsworth, Blehar, Waters, & Wall, 1978)

#### Preattachment (Birth to 6 Weeks)

From their earliest days, infants act in ways that attract others to care for them. It is very difficult to sit and do nothing when we hear a baby crying, especially if that baby is our own. Both new mothers and new fathers experience hormonal changes following childbirth that may increase their responsiveness to their baby’s distress, such as more rapid heartbeats and other physiological responses that promote caregiving to their new

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**WEB LINK 7.1 Bowlby’s Stages**

**Preattachment** The stage of development of attachment from birth to 6 weeks, in which infant sensory preferences bring infants into close connection with parents.

**Attachment in the making** The stage from 6 weeks to 6–8 months in which infants develop stranger anxiety, differentiating those they know from those they don’t.

**Clear-cut attachment** The stage from 6–8 months to 18 months–2 years, when an infant develops separation anxiety when a person he is attached to leaves him.

**Goal-corrected partnership** The stage of development of attachment from 18 months on, when toddlers create reciprocal relationships with their mothers.

As we discussed in Chapter 5, the sensory preferences of infants, such as smell and vision, predispose them to social interactions with the world in general, and with their mothers in particular. Infants can immediately imitate some facial expressions, they prefer to look at faces rather than inanimate objects, they respond to voices, and most love to be touched and held. Their cry communicates their needs to those around them and draws others to care for them. Even at birth infants look at other people’s eyes and begin to follow the direction in which someone is looking with their own gaze (Farroni, Massaccesi, Pividori, & Johnson, 2004).

Within the first year, their attraction to eyes helps them engage in a process called joint attention (Flavell, 1999; Gredebäck, Fikke, & Melinder, 2010). In joint attention, the infant looks at the same object someone else is looking at but also looks at the person; that is, he monitors the other person’s attention to make sure they are both involved with the same thing (Akhtar, 2005). When infants engage in joint attention, they begin to explore the world together with their caregivers.

**Attachment in the Making (6 Weeks to 6–8 Months)**

Babies begin to smile at about 6 weeks of age. At first these smiles seem almost random, but by about 2 months, babies clearly have developed a social smile directed specifically at people (Ellsworth, Muir, & Hains, 1993). Very quickly, smiling becomes reserved for people the baby recognizes. A 3-month-old baby may look seriously at a stranger but begin to grin when he sees his mother. These early signs of recognition and responsiveness begin to lay the foundation for a special relationship with the familiar and important people in the baby’s social world.

In many infants, this early discrimination between familiar and unfamiliar intensifies. If you have ever gone to babysit for a 6-month-old infant who has never met you before, you know what stranger anxiety means. Sometimes all the baby has to do is see a stranger and she begins wailing. In other cases, the baby may interact and smile as long as she is in her mother’s arms, but if the stranger tries to hold her, the crying begins.

**Clear-Cut Attachment (6–8 Months to 18 Months–2 Years)**

In the stage of clear-cut attachment, infants begin to move about on their own and become able to actively maintain contact with their caregiver. Infants now clearly discriminate between their attachment figures and strangers. During this stage, babies seek out their parents when they are stressed or afraid, but separation from parents, in and of itself, becomes frightening, and infants begin to protest when their parents leave. This distress is referred to as separation anxiety. An infant crying at the departure of someone who helps the infant feel secure does not indicate an excessive attachment to that person. It is quite a normal reaction. In addition, the parent becomes a secure base for exploration. When a parent is around and the infant can get to the parent, he is comfortable to explore, but if the parent is absent, exploration may stop. Although you can control your emotions better than an infant, you may remember a time when you were separated from the people you love and felt anxiety about being on your own without them. Did you call or text your parents or friends back home more frequently? In this situation, you can see that we continue to need the “emotional refueling” we see in infants.

**Goal-Corrected Partnership (18 Months On)**

As the baby becomes a toddler, she becomes increasingly aware that her mother has goals and motives different from her own. At this point, she realizes she must create a partnership with her mother through their interaction. This partnership is based on
the idea of two separate individuals interacting, each with an equal part in keeping the interaction going (Bowlby, 1969).

Toddlers now are able to form symbolic representations of the particular attachment relationships they have been experiencing (Bowlby, 1969). This concept, referred to as an internal working model of attachment, has helped psychologists understand how early attachment patterns contribute to the close relationships that children—and even adults—develop later in life. Based on our past experiences, an inner script develops, so in this sense our future interactions are shaped by our past interactions. For example, a child who has been abused may expect aggression from others, and this expectation will shape how the child behaves when meeting new people. Abused children may respond to new people by provoking them to anger, possibly re-creating the abuse situation they have experienced. In a similar way—but with a very different outcome—children who have been warmly cared for come to expect that others will treat them positively, so they themselves act in a warm and engaging way. Their own positive interactions then elicit positive responses from others.

Although research supports the idea that internal working models are fairly stable over time, they can be modified (Pietromonaco & Barrett, 2000). It takes time and patience to overcome the expectations a child with a negative working model of attachment has developed for new relationships, but it can be done.

Security of Attachment

As you read in Journey of Research: The History of the Study of Attachment, Mary Ainsworth worked with John Bowlby and further developed his ethological theory. Ainsworth was interested in looking at individual differences in the types of attachment that infants and mothers formed together, based on the degree of security the infant felt in that relationship. She developed an experimental procedure to classify types of attachment known as the Strange Situation. The Strange Situation places an infant and mother in a series of situations that become increasingly stressful for the infant. Except for the first episode, each lasts 3 minutes unless the baby is crying, in which case the time period is cut short.

1. An observer brings mother and baby into a comfortable room equipped with a one-way mirror and immediately leaves.
2. Baby plays while mother responds naturally.
3. Stranger enters, and at the end of 3 minutes the mother leaves.
4. Baby is in the room with the stranger, who may interact with the baby.
5. Mother returns, stranger leaves, and at the end of 3 minutes the mother again leaves.
6. Baby is alone for 3 minutes.
7. Stranger enters and may interact with the baby.
Based on her observations of infants’ reactions during the Strange Situation, Ainsworth described four types of attachment: secure attachment, anxious avoidant attachment, anxious ambivalent/resistant attachment, and disorganized/disoriented attachment, which we describe below.

Ainsworth found two behaviors in her observations that best identified the type of attachment relationship infants had with their mother. The first was the child’s ability to be comfortable and explore a new setting while the mother was in the room, with the mother acting as a secure base for exploration. The second was the child’s response to the mother’s return to the room, known as reunion behavior—that is, the child’s ability, when stressed by the mother’s departure, to use the mother on her return to calm down and return to playing. Interestingly, distress at separation by itself was not a reliable indicator of type of attachment. Table 7.2 describes the typical infant and mother behaviors for each type of attachment.

Infants with secure attachment rely on their parent to respond to their needs and turn to their parent when they are stressed. The baby’s reliance on a trustworthy parent allows her to explore the environment, knowing mother is there to help if needed. In contrast, infants with insecure attachment have learned that their parent is not as available to them and have adapted in one of two ways. In anxious avoidant attachment, the mother has been unresponsive to her infant, and the infant has learned not to rely on her help and support. This infant is not distressed when his mother leaves the room, is just as comfortable with the stranger as with his mother, and, when his mother returns to the room, does not rush to greet her. In anxious ambivalent/resistant attachment, the mother may interact positively with her infant, but she does not respond to the infant’s cues. For example, she may ignore the baby when he is trying to get her attention but interacts when the baby is more interested in sleeping than interacting. In anxious ambivalent/resistant attachment, the infant is reluctant to move away from his mother to explore the room, is very distressed when his mother leaves the room, and will not let the stranger comfort him. However when mother returns, the infant’s behavior is described as “ambivalent” because he seems to want to approach his mother but also appears angry and resists the mother’s attempt to pick him up (Bosma & Gerlsma, 2003).

Although the first three types of attachment differ in the level of security or trust in the relationships, all are organized and coherent ways of responding to a particular situation. The fourth category, disorganized/disoriented attachment, describes infants whose behavior is unpredictable and odd and shows no coherent way of dealing with attachment issues (Hennighausen & Lyons-Ruth, 2010). This category is often linked with parental abuse or neglect and is connected with unmanageable fear. Think about how this pattern would develop. The very person to whom the baby would normally turn when afraid is the same person causing the fear. The babies don’t know what to do or where to turn. They cannot organize their behavior because they do not have a predictable environment. They never know what to expect or what is expected of them.

### Attachment as a Relationship

Attachment is based on the relationship between two people, each of whom has an impact on the nature of the relationship. The interaction of a particular child and a particular parent creates a unique relationship different from that between any other two people.

#### The Role of the Mother

Sometimes the literature on attachment makes it sound like an insecure attachment is the fault of the infant’s mother because she wasn’t sensitive enough or responsive enough. However, the quality of an infant’s attachment is the product of a number of different factors working together. Parents don’t have to be perfect to have a securely attached...
infant. There is enough resiliency in both infants and parents that most often the outcome is a positive one.

What could affect the mother's ability to be a sensitive, responsive caregiver to her baby? The factors are remarkably similar to those that help someone through any stressful situation. Remember from Chapter 4 that the transition to becoming a new parent can be a stressful one. Having social, emotional, and material support is important to new mothers because it helps them maintain a positive relationship with their babies. Mothers are more likely to respond positively to their babies when they have the following:

- A positive relationship with their partner
- Adequate economic resources
- Good psychological health (for example, maternal depression has been linked to insecure attachment)
- A history of good care in their own childhood
- An infant who is easy to care for (Cox, Paley, Payne, & Burchinal, 1999; Crockenberg & Leerkes, 2003; Figueiredo, Costa, Pacheco, & Pais, 2009; Martins & Gaffan, 2000)

In 1979, two medical doctors, John Kennell and Marshall H. Klaus, vigorously promoted the importance of early attachment. They presented research they believed demonstrated that newborn human infants must experience close physical, skin-to-skin contact with their mothers within a few hours after birth for the mothers to be able to form a bond with them. This research transformed the way that hospitals treated new mothers and their infants. Rather than being separated, newborns and their mothers were given an opportunity to interact immediately following birth. However, subsequent research failed to support the long-term effect of early contact on attachment.

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**TABLE 7.2**

<table>
<thead>
<tr>
<th>Type of attachment</th>
<th>Security/organization</th>
<th>Safe base for exploration</th>
<th>Reunion with caregiver</th>
<th>Early mothering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure</td>
<td>Secure/organized</td>
<td>Explores freely with caregiver present</td>
<td>Seeks out caregiver and is easily soothed by caregiver</td>
<td>Is responsive to infant’s needs</td>
</tr>
<tr>
<td>Anxious avoidant</td>
<td>Insecure/organized</td>
<td>Explores with or without caregiver’s presence</td>
<td>Does not seek out caregiver</td>
<td>Is emotionally unavailable, dislikes neediness</td>
</tr>
<tr>
<td>Anxious ambivalent/ resistant</td>
<td>Insecure/organized</td>
<td>Stays close to caregiver, doesn’t explore freely</td>
<td>Both seeks and rejects contact with caregiver</td>
<td>May be attentive, but not in response to baby’s cues or needs</td>
</tr>
<tr>
<td>Disorganized/disoriented</td>
<td>Insecure/disorganized</td>
<td>May “freeze,” explores in a disorganized fashion</td>
<td>May go to caregiver while looking away, shows a dazed expression or fear</td>
<td>Shows intrusiveness, maltreatment, and/or emotional unavailability, confuses or frightens the child</td>
</tr>
</tbody>
</table>

This table shows Ainsworth’s four types of attachment with their associated behaviors in the Strange Situation and aspects of mothering that have been related to each type.

**SOURCES:** Ainsworth (1979); Shamir-Essakow, Ungerer, & Rapee (2005); Sroufe (2005); Sroufe, Egeland, Carlson, & Collins (2005).

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**T/F #5**

Mothers must have immediate contact with their babies after they are born if a secure attachment is to be formed. **False**
for full-term infants (Eyer, 1992; Myers, 1984). When the newborn is healthy, immediate skin-to-skin contact is wonderful for mother and baby but does not determine their emotional attachment to each other. However, the situation is somewhat different for premature infants. When normal attachment processes are disrupted because of the medical care required by premature infants, taking infants out of the incubator to allow mothers to have skin-to-skin contact with their baby does help promote attachment and also improves the baby’s development through age 10 (Feldman, Rosenthal, & Eidelman, 2014).

The Role of the Father

Fathers have often been neglected in the research on infant attachment, but it has become clear that infants are capable of forming more than one relationship and that the unique relationship they develop with their fathers plays an important role in their lives (Braungart-Rieker, Courtney, & Garwood, 1999). Some research has shown that fathers are more likely to react sensitively to their sons than to their daughters, and that baby boys are more likely than baby girls to be securely attached to their fathers (Schoppe-Sullivan et al., 2006). However, both boy and girl infants form attachments to both parents during their first year, and the attachment to the father is likely to be as secure as that to the mother (Schneider Rosen & Burke, 1999).

The Role of the Infant

Infants, too, play a role in the type of attachment relationship formed with the parent. Infant temperament is particularly important if the infant is irritable, cries easily and with intensity, and is difficult to soothe. In one study, maternal sensitivity predicted whether the attachment was secure or not, but it was the infant’s temperament that predicted the type of insecurity an insecurely attached infant exhibited (Susman-Stillman, Kalkose, Egeland, & Waldman, 1996). For instance, at 3 months of age, infants who had lower levels of sociability were more likely to have an avoidant attachment at 6 months of age, and infant irritability predicted anxious ambivalent/resistant attachment.

In addition to temperament, other infant characteristics such as premature birth and neurological problems can affect the way attachment is first formed (Brisch et al., 2005). One factor is a condition called infantile colic, in which babies cry inconsolably for long periods of time for no apparent reason. Mothers of colicky infants may interpret the babies’ inability to be comforted as a personal rejection, leading them to question their efficacy as a parent (Landgren & Hallström, 2011; Pauli-Pott, Becker, Mertesacker, & Beckmann, 2000). At the very least, infantile colic is exhausting, both emotionally and physically, for all members of the family (Landgren & Hallström, 2011).

All Together Now

Rather than looking only at the parent or only at the baby, researchers are increasingly focusing on the ongoing relationship in which the characteristics and behaviors of the parent and the baby shape each other over time. For example, in one study, when infants in the first 6 months of life had a high level of intense and frequent crying, mothers were less likely to be highly sensitive to their infants by the time they were 6 months old. This combination of factors, in turn, led the infant to have an insecure attachment at 1 year of age (Sroufe, 2005). In other words, the baby’s behavior affected the mother’s ability to respond sensitively, and this interaction influenced the quality of the attachment
relationship. To further complicate the picture, Crockenberg and Leerkes (2003) found that mothers were likely to be less sensitive to these infants only when they were at risk because of poverty, inadequate social support, or a history of parental rejection. Mothers who were not at risk were often more engaged with their fussy babies.

A way to check your own understanding of the various factors that influence attachment is to see whether you can apply it. Try Active Learning: Educating Parents.

**Active Learning**

**Educating Parents**

Imagine you are a parent educator. Given what you now know about the formation of attachment, plan a class for new parents to explain what attachment is and how they can promote secure attachment in their baby. To get started, think about how you would define attachment for these new parents. What would you tell them about where attachment comes from and how stable it is? What are the best things parents can do to help ensure their infant will develop a secure attachment? What can parents do for themselves to become effective and loving parents?

**The Biology of Attachment**

Researchers are uncovering many links between behavior and biology. In the study of attachment, they have looked for neurochemical explanations of the development of adaptive and maladaptive behaviors. Researchers have studied adopted children reared in conditions of severe neglect in orphanages in Romania and Russia (Fries, Ziegler, Kurian, Jacoris, & Pollak, 2005). Many of these children continued to have problems forming secure attachment relationships with their adoptive parents even though their situations had dramatically improved and they now had parents who wanted and loved them very much.

Fries et al. (2005) found that 3 years after they had been adopted, these children had different biochemical responses to social interaction than other children. Children raised by their parents from birth experienced a rise in the neurochemical oxytocin after interacting with their parents. This neurochemical may be linked with a positive feeling that arises in connection with warm social interactions (Carter, 2005). However, previously neglected children did not demonstrate a similar rise in oxytocin following interaction with their adoptive parents. Many also produced very low levels of vasopressin, a neurochemical linked with the ability to recognize individuals as familiar. Children reared in deprived situations sometimes will run to any available adult when distressed rather than to their parents. It is not yet clear whether these chemical responses are set for life or whether they can change with experience.

**Attachment and Culture**

Remember that Bowlby (1969) thought attachment behaviors were adaptive behaviors that helped ensure the survival of infants. This suggests that we should see attachment in cultures all over the world, and quite a few cross-cultural studies have tested this premise. Many have focused on one of two questions: (1) Is the proportion of secure versus insecure attachments in infants similar from one culture to another? (2) What does a “securely attached” infant look like to mothers in different cultures?

In regard to the first question, cross-cultural research has found that the proportion of infants classified by the Strange Situation as having a secure attachment does not differ very much from one country to another (Posada & Jacobs, 2001; Svanberg, 1998;
van IJzendoorn & Sagi-Schwartz, 2008). Secure infants typically account for about two-thirds of the subjects in a study. What is more likely to differ across cultures is the proportion of infants in the different categories of insecure attachment.

In American and Northern European cultures, the most common insecure category is avoidant attachment, but in Israel, Korea, and Japan it is anxious/ambivalent attachment (Jin, Jacobvitz, Hazen, & Jung, 2012; Svanberg, 1998). Table 7.3 shows a comparison of secure, avoidant, and resistant attachment types in the United States, Japan, Korea, and a larger international sample of infants. Disorganized/disoriented attachment, which is not included on this table, was found in 15% of infants in Korea as well as in North America and Europe (Jin et al., 2012; Lyons-Ruth & Jacobvitz, 2008). In Japan, research on attachment has been complicated by the Japanese concept of amae, an emotional interdependence between a caregiver and child encouraged by the Japanese culture but not identical to the Western concept of attachment (Rothbaum, Kakinuma, Nagaoka, & Azuma, 2007). This has led Nakagawa, Lamb, and Miyaki (1992) to question whether a measure such as the Strange Situation, which has been used primarily with middle-class Western samples, is valid as a cross-cultural measure.

That leads us to our second question. Rather than asking where children in different cultures fall in Ainsworth’s classification scheme, we can ask what parents in different cultures think a securely attached infant looks like. In the United States, mothers are more likely to associate secure attachment in their infants with autonomy and self-determination. In other words, a child is seen as secure if she can move away from her mother and play independently. Mothers in Japan are more likely to see their children as secure if they show behaviors that put them into harmony with others: accommodating to other people, behaving well, and cooperating (Rothbaum et al., 2007). In addition, Japanese mothers are more likely to see their children’s unreasonable demands for attention (such as crying every hour through the night while all their needs have already been met) as a need for closeness or interdependence, whereas American mothers tend to see this behavior as testing the limits and asserting one’s self.

Likewise, although sensitive mothering is related to secure attachment in most cultures, the definition of sensitivity may vary. For example, Carlson and Harwood (2003) found Puerto Rican mothers more likely than mothers in Boston to be physically controlling of their infants. In the United States, this type of physical control has been seen as insensitive, but for Puerto Rican babies, this type of physical control is a positive value in their culture because it leads to respectful behavior, which is highly valued.

This research reminds us of how difficult it is to search for universal developmental processes when they can take so many forms as we move from one culture to another.

### Table 7.3

<table>
<thead>
<tr>
<th></th>
<th>Avoidant A</th>
<th>Secure B</th>
<th>Resistant C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sapporo, Japan</td>
<td>0 (0%)</td>
<td>41 (68%)</td>
<td>19 (32%)</td>
</tr>
<tr>
<td>Baltimore, USA</td>
<td>22 (21%)</td>
<td>70 (67%)</td>
<td>13 (12%)</td>
</tr>
<tr>
<td>Global Sample</td>
<td>23 (21%)</td>
<td>1,294 (65%)</td>
<td>273 (14%)</td>
</tr>
<tr>
<td>Taegu, Korea</td>
<td>1 (1%)</td>
<td>66 (78%)</td>
<td>18 (21%)</td>
</tr>
</tbody>
</table>

Although there are similar percentages of securely attached infants in many cultures, the type of anxious or insecure attachment differs between countries.

**Source:** Jin, Jacobvitz, Hazen, & Jung (2012).
We always need to guard against assuming that the way things work in one culture will describe how they work somewhere else.

**Continuity and Discontinuity in Attachment**

In this section we examine the long-term effects of attachment in infancy, and we also look at other factors that limit or change the impacts of early attachment on later development.

**Long-Term Outcomes of Infant Attachment**

Research has shown long-term effects of security of attachment in infancy, as Bowlby’s concept of internal working models would predict. Securely attached infants have more internal resources with which to cope with difficult events. In their early years, their relationship with their parents serves to soothe and modulate their reactions to frightening or other arousing events. This soothing is then internalized so that at an older age the child or adolescent is able to soothe himself when needed. Table 7.4 gives you some examples of what is going on in the minds of children with different types of internal working models.

One reason security of attachment in infancy can predict later outcomes is that there is a good deal of continuity in attachment styles over time. Several factors contribute to this continuity. Most families do not change drastically over time, so characteristics of parenting remain stable and the patterns of attachment and adaptation developed in infancy continue to be reinforced by later experiences. Also, as we have already described, children usually continue to behave in ways that cause their later relationships to replicate their earlier ones.

<table>
<thead>
<tr>
<th>Type</th>
<th>Internal working model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure</td>
<td>• I can trust and rely on others.</td>
</tr>
<tr>
<td></td>
<td>• I am lovable, capable, significant, and worthwhile.</td>
</tr>
<tr>
<td></td>
<td>• My world is safe.</td>
</tr>
<tr>
<td>Anxious avoidant</td>
<td>• Other people are unavailable and rejecting.</td>
</tr>
<tr>
<td></td>
<td>• I have to protect myself.</td>
</tr>
<tr>
<td></td>
<td>• If I deny my needs, I will not be rejected.</td>
</tr>
<tr>
<td></td>
<td>• If I do what is expected of me, I will not be rejected.</td>
</tr>
<tr>
<td></td>
<td>• If I take care of others and deny my own needs, I will be loved.</td>
</tr>
<tr>
<td>Anxious ambivalent/</td>
<td>• Others are unpredictable, sometimes loving and protective, sometimes hostile and</td>
</tr>
<tr>
<td>resistant</td>
<td>rejecting.</td>
</tr>
<tr>
<td></td>
<td>• I don’t know what to expect—I am anxious and angry.</td>
</tr>
<tr>
<td></td>
<td>• I cannot explore—I may miss an opportunity for love and affection.</td>
</tr>
<tr>
<td></td>
<td>• If I can read others and get them to respond, I will get my needs met.</td>
</tr>
<tr>
<td>Disorganized/</td>
<td>• My caregiver, at times, seems overwhelmed by me and, at other times, seems very</td>
</tr>
<tr>
<td>disoriented</td>
<td>angry with me.</td>
</tr>
<tr>
<td></td>
<td>• Others are abusive—neglectfully, physically, emotionally, and/or sexually.</td>
</tr>
<tr>
<td></td>
<td>• I am unable to get my needs met. I don’t know how to protect myself.</td>
</tr>
</tbody>
</table>

Think about how having each type of internal working model of attachment would affect a child’s approach to and interaction with new people.

**SOURCE:** Public Health Agency of Canada (2003).
However, what happens when a child’s life circumstances do change? For instance, what happens when a mother who had developed a secure attachment with her baby becomes preoccupied with a bad marital relationship or becomes depressed? Ample evidence shows that new life circumstances can change a secure attachment to an insecure one and vice versa (Weinfield, Whaley, & Egeland, 2004). Moss and colleagues studied attachment in children at age 3-1/2 and assessed their attachment again 2 years later (Moss, Cyr, Bureau, Tarabulsy, & Dubois-Comtois, 2005). The majority maintained the same attachment style, but children whose attachment style changed from secure to insecure and/or disorganized/disoriented were more likely to have experienced events such as parental hospitalization or death, decreased quality of mother-child interaction, and decreased marital satisfaction of their parents.

A child’s attachment also can change for the better if the parents take part in interventions designed for parents of infants with insecure attachments. These programs can and do change parenting patterns and allow for changes in attachment over time (for example, see Bernard et al., 2012). Therefore, it is clear that infants’ earliest attachment experiences do not doom those who begin with insecure attachment and are not a guarantee for those who begin with secure attachment. Even though insecurely attached infants are at increased risk of psychological problems compared to securely attached infants, a variety of factors, including a positive relationship with some other caring adult or the child’s own characteristics, can help promote positive development.

**The Effects of Later Experiences**

Even if attachment style remains consistent as children grow and develop, many other life circumstances may affect and moderate the effects of early attachment experiences. As Alan Sroufe and his colleagues have found, later experiences interact with early attachment relationships to help influence adult functioning. In 1974 and 1975, they recruited 257 low-income pregnant women for a longitudinal study of their children from birth through age 26 (Sroufe, Carlson, & Shulman, 1993). In early research reports, Sroufe and his colleagues reported straightforward effects of secure attachment in infancy on later development. Securely attached infants became children who were more competent in their interactions with peers, were more self-reliant, and had better self-control (Sroufe et al., 1993).

However, as the children got older, the picture became much more complicated. For example, while the researchers did not find a direct link between early attachment and the ability to have intimate, romantic relationships in early adulthood, there was an indirect link, mediated through subsequent experiences in the person’s life. Although secure attachment in infancy prepares the child for later positive peer relationships, the child’s history with peer relationships independently predicted some aspects of adult relationships more clearly than early attachment history, and the combination of early attachment and later experiences with peers was even more predictive of some aspects of later romantic relationships. Each stage provides the foundation for the next, but experiences at each successive stage also change the nature and direction of a child’s development (Van Ryzin, Carlson, & Sroufe, 2012).

**Attachment Disorders**

Only a rare few children have such difficulties in all their attachment relationships that they require intervention (Balbernie, 2010). The DSM-5 (APA, 2013) recognizes two such conditions, reactive attachment disorder and disinhibited social engagement disorder. Both are based on caregiving experiences in infancy such as abuse and neglect that interfere with the formation of secure relationships.

A child with reactive attachment disorder (RAD) does not seem able to form any attachment. The child is withdrawn with caregivers and shows disturbance in both

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**T/F #6**

If a child has developed an insecure attachment to a parent, that child can still become securely attached later in her life. **True**
Disinhibited social engagement disorder

An attachment disorder in which children approach strangers indiscriminately, not differentiating between attachment figures and other people.

social and emotional functioning (APA, 2013). A child with disinhibited social engagement disorder is indiscriminate in whom he goes to. He does not seem to have any special relationship with his caregiver, and his reaction is the same whether he is interacting with a stranger or someone he knows well (APA, 2013). It has been argued that this type of behavior is actually adaptive for children who have been abandoned or mistreated, because children who have no effective parenting may do best when they approach a broad range of adults for help (Balbernie, 2010). The problem is that these children do not change their behavior even when adopted into caring families, and this can cause problems if the adoptive parents do not understand the cause.

Much research has focused on children raised in the deplorable conditions found in orphanages in Romania. In the 1980s, the country’s leader, Nicolae Ceausescu, wanted to increase the population and therefore abolished access to contraception and abortion and forced women to continue having children beyond the ability of their families to care for them. As a result, over 100,000 children were sent to Romanian orphanages that were not prepared to care for their physical, mental, or emotional needs (Kaler & Freeman, 1994). One study reported that an individual child would be cared for by as many as 17 different caregivers in a single week (Zeanah et al., 2005). After reading about how an infant forms a secure attachment with a caregiver, you can see why children in these orphanages could not form attachments. They never had the consistent, sensitive, or responsive caregiving necessary for this bond to form.

One group of researchers developed a foster care program that could accommodate some of the institutionalized children (Smyke et al., 2012). They compared the incidence of reactive attachment disorder in those who remained in the institutions to those in foster care and to a control group who had never been institutionalized. Institutionalized infants and toddlers between the ages of 6 and 30 months had more signs of RAD than the control group. However, for those who were then moved into foster care, the incidence of RAD declined to the same level as the noninstitutionalized control group. The researchers also assessed the children for indications of disinhibited social engagement disorder and found that these behaviors also declined, but remained higher than the level of the control group. It appears that moving infants to a more secure environment improves attachment, but there may be limits, at least in the early years of a child’s life. Families that adopt children with attachment disorders need to recognize that much hard work will be needed to try to reverse the negative effect of the child’s earlier experiences.

Although the eventual outcome for many Romanian orphans who were adopted was positive, it is much better to try to prevent and/or treat attachment disorders in high-risk populations, such as children living in poverty or in abusive families, than to try to fix the problem after it occurs. Bakermans-Kranenburg, van IJzendoorn, and Juffer (2003) found that the most effective therapies focused on developing the mother’s sensitivity to her baby. As maternal sensitivity increased, so did infant-mother attachment. Although only a few programs to date have targeted the sensitivity of both mothers and fathers, those that did found an even greater effect than those that intervened only with the mother.
Check Your Understanding

1. What are Bowlby's stages of attachment?
2. Describe the Strange Situation.
3. How does early attachment have an effect on later relationships?
4. What are reactive attachment disorder (RAD) and disinhibited social engagement disorder?

Contexts of Development

The primary context for infants’ social-emotional development is the family, but other influences such as nonfamily care, culture, media, and peer relationships all play a role in their lives. In this part of the chapter, we examine some of the life experiences that shape the development of infants and toddlers.

Family Relationships

“Few would dispute that the family is the basic social unit in the organization of human society and a primary context for the development and socialization of society’s children” (McLoyd, Hill, & Dodge, 2005, p. 3), yet the definition of family may differ widely from one cultural setting to another. For instance, in southern India, a woman marries all of her husband’s brothers, and her children are each assigned to one of the brothers, not necessarily the biological father (Coontz, 2000). In Micronesia, an Ifaluk family consists of two sets of parents: biological and adoptive. Anyone can ask a pregnant woman for permission to adopt her baby. The baby will live with its mother until age 3 when it will move in with the adoptive family, with both families being involved with the child’s upbringing (DeLoache & Gottlieb, 2000).

Families differ in many ways within the United States as well. The U.S. Census Bureau (2008a) defines a family as any two individuals living together who are related by birth, marriage, or adoption. Many people think of a family as being a husband and wife living with their biological and/or adopted children, or what is called a nuclear family, but a family can have a number of different structures. There are single-parent families, multigenerational families, families with two same-sex partners, and families formed by adoption, divorce, or remarriage. Coontz (2000) has concluded that the major difference between current and earlier levels of diversity in family form is not “the existence of diversity but by its increasing legitimation” (p. 28). Diverse forms of family life have been increasingly recognized as acceptable ways to raise children.

Divorce

You may have heard the statistic that half of all marriages in the United States end in divorce. How children understand and react to their parents’ divorce will depend in large part on their age. For that reason, we talk about this topic in several chapters, each time focusing on age-specific information. Most of the research on family transitions has studied school-age children and adolescents. Only limited research on the effects of divorce and separation has been conducted with infants (Clarke-Stewart, Vandell, McCartney, Owen, & Booth, 2000; Tornello et al., 2013), despite the fact that a considerable number of very young children are exposed to these events. Nearly 20% of first marriages end in separation or divorce within the first 5 years (Tornello et al., 2013) so, if there are children in the marriage, the chances are high that they will be infants or toddlers.

Infants and toddlers do not understand what is happening when parents separate. Instead they resonate to their parents’ distressed feelings and to disruptions in their normal routines and this can result in a number of behavioral problems. These can include

T/F #7
Infants are too young to be affected by parental divorce. False
anger and aggression, separation anxiety, eating or sleep problems, or loss of recent developmental achievements such as toilet training or language development (Cohen & the American Academy of Pediatrics Committee on Psychosocial Aspects of Child and Family Health, 2002; Kalter, 1990).

Given the central role attachment plays in infant development, it is not surprising that the limited research conducted has focused on the impact of marital transitions on attachment security. It is not uncommon for children whose parents are separated or divorced to spend some amount of time with the nonresident parent, but overnight separations from the primary caregiver can be stressful for an infant (George, Solomon, & McIntosh, 2011). We ordinarily think that maintaining contact with both parents following a divorce is a good thing for a child, but based on what we know about attachment theory, we could argue that infants who are still in the process of forming an attachment relationship should not spend a lot of time away from their primary caregiver because it can contribute to attachment insecurity. On the other hand, infants can form qualitatively different attachments to multiple caregivers, so frequent overnight visits with the nonresident parent give the young child the chance to do this and in this way such visits may be beneficial to the child.

To test these ideas, Tornello et al. (2013) looked at infants and toddlers from low-income, primarily racial/ethnic minority families. In this sample of fragile families, they report that 6.9% of infants under the age of 1 year and 5.3% of toddlers ages 1 to 3 spent an average of one overnight per week with their nonresident parents. This research found that frequent overnight visits (at least one night a week) with nonresident fathers were associated with attachment insecurity among infants but the association was not clear for toddlers. This suggests that an attachment relationship is more vulnerable when it is in the early stages of formation, as attachment theory would predict (McIntosh, Smyth, Kelaher, Wells, & Long, 2010). The percentage of infants classified as insecurely attached was 43% for the frequent overnight group, 25% for infants who had only day contact with their fathers, and 16% for infants who had fewer than one overnight visit per week. However, more frequent overnights were not related to adjustment problems at older ages.

None of this means nonresident fathers should not have contact with their infants. Rather the recommendation is that the visitation of the nonresident parent should be “frequent, short, on a very regular and stable basis” and should take place in surroundings familiar to the infant (Ram, Finzi, & Cohen, 2002, p. 46). As the infant gets older, they can better tolerate separation from their primary caregivers, and overnight visits will cause less distress.

Is the effect on attachment security of a parental divorce in infancy specific to the parental relationship, or does it generalize to all future relationships, as the idea of an internal working model would suggest? There is evidence that people who have secure attachment relationships with parents also tend to have secure attachment relationships with romantic partners (Sibley & Overall, 2008), but the different experiences we have across types of relationships could result in qualitatively different working models. In a test of these ideas, people who were younger when their parents divorced were more likely to have an insecure attachment to their parents than people whose parents had divorced when they were older, with the highest level of insecurity for those who experienced parental divorce during the first few years of life (Fraley & Heffernan, 2013). The effects of parental divorce were much stronger for the future relationship with parents than it was for romantic relationships, suggesting that we can form different working models for different relationships in our lives.

Three out of 4 people who divorce will remarry (Coleman, Ganong, & Warzinik, 2007), and when there are children involved, stepfamilies form. In fact, 1 out of every 3 American children will live in a stepfamily at some point during their childhood or adolescence (Braithwaite, Schrodt, & DiVerniero, 2009). Parents who remarry should remember that young children need consistency and stability in their relationships and...
environments. With some effort, this consistency can be maintained even while parents’ relationships are undergoing change. Recall that infants can form multiple attachment relationships, and the addition of new attachment figures does not necessarily harm the quality of existing attachments.

**Grandparents Raising Grandchildren**

According to the 2010 U.S. Census, almost 7.8 million children under the age of 18 are raised by their grandparents or other relatives and those under the age of 6 are more likely to live with a grandparent than older children. About 20% of these grandparents raising grandchildren live below the poverty line (American Association of Retired Persons, 2014).

Even when grandparents are not the main caregivers for their grandchildren, their role has been expanding to fill gaps in single-parent and divorced families or families in which both parents work outside the home (Bengtson, Dunn, Fergusson, & Maughan, 2006). When parents are still in their children’s lives and are close to their own parents, then grandparent-grandchildren relationships are likely to be close as well, with help going both ways. The children help the grandparents, and the grandparents care for their grandchildren (Dunn et al., 2006).

Grandparents become their grandchildren’s main caretakers for many reasons: death of the parents, illness, incarceration, drug addiction, or other difficulties that prevent parents from filling their parental role (Dunifon, 2013). Sometimes grandparents are formally named as the major caretakers by child welfare agencies, but more often the arrangements are informal. In these cases, the agencies that help families find resources may not know about the arrangements so they are not able to help the grandparents in this way (Raphel, 2008). Without formal legal rights, grandparents can be hindered in taking care of their grandchildren’s needs. For instance, they cannot give permission for medical care and may have difficulty enrolling the child in school (AARP, 2014).

Although grandparent-headed families are marginalized, some programs are specifically designed to help them. For example, in Hartford, Connecticut, a program called the Community Renewal Team provides help to 24 families in which grandparents are raising their grandchildren (AARP, 2014). Housing is provided with rent on a sliding scale, along with free after-school child care on a campus separated from the dangerous neighborhood that surrounds it. A variety of services are offered both to the grandparents and to the children. Not only does this program benefit the families participating in it, but it also saves taxpayers the money that otherwise would be spent placing the children in foster care.

**Adoptive Families**

In 2008, approximately 136,000 children were adopted in the United States (Child Welfare Information Gateway, 2011). Infants under 2 account for only 6% of adoptions; another 9% are toddlers and preschoolers (Vandivere, Malm, & Radel, 2009). This compares to the 60% of adoptees who are between the ages of 5 and 12.

Professionals who study and work with adoptive families point to the value of developing the “family story” for adopted children. Parents can begin to tell children the story of their adoption, in simple terms and in a loving context, even before they can really understand it. This sets the stage to fill in details as the child grows and is able to understand more. When the details are difficult, the parents walk a fine line between “honoring the birthparent and acknowledging hardships and limitations” (Rampage, Eovaldi, Ma, Weigel-Foy, 2003, p. 217). About 14% of adoptions are intercountry adoptions. Respecting the child’s cultural origins becomes especially important in these families.

Most adoptions today are open adoptions, in which the child and the birth and adoptive families have access to each other, although the amount of information shared and the frequency of contact between the adopted child and the biological parents or other

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**T/F #8**

Most adopted children are adopted as infants.  
**False**

Open adoptions: Adoptions in which the children and their biological and adoptive families have access to each other.

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relatives are very variable (Siegel, 2012). In one study, adoptive parents were interviewed about their attitudes about their open adoption of an infant at the time of the adoption and 20 years later (Siegel, 2013). None regretted having an open adoption, and nearly half wished it was even more open.

**Foster Care**

In some circumstances children must be removed from their homes for their own well-being. They may have experienced abuse or neglect, or their parent may be unable to care for them because of mental or physical illness, incarceration, substance abuse, or even death (American Academy of Child and Adolescent Psychiatry [AACAP], 2005). When there are no alternative caregivers within the family, these children are likely to be placed in the foster care system with a foster family that receives financial support from the state. Everyone involved in this placement knows this is a temporary situation. The child may return home, move to another foster home or institution, or eventually be legally released for adoption. Currently there are slightly less than 400,000 children in foster care in the United States (Adoption and Foster Care Analysis and Reporting System, 2013).

The temporary nature of a foster care placement brings particular challenges for infants and toddlers who need consistent care to promote development. Experiencing child abuse or neglect and then a change in caregivers when the child is removed from the home contributes to higher levels of disorganized attachment among infants and toddlers in the child welfare system (Dozier, Zeanah, & Bernard, 2013). Toddlers are more likely to reject their temporary caregivers, which can, in turn, elicit rejection from even well-meaning caregivers. The more changes in caregiving the child experiences, the more likely the child is to develop difficulties with self-control and inhibition (Lewis, Dozier, Ackerman, & Sepulveda-Kozakowski, 2007). Foster parents vary in how committed they are to a particular child. Children who experience a lack of commitment from caregivers are more likely to see themselves negatively and have problem behaviors (Dozier et al., 2013).

Foster parents must not only be able to fully commit to an infant or toddler in their care, but also be ready to support the child’s return to the birth parents. The participation of foster parents in supervised visits with the birth parents is important to help the infant make a smooth transition between homes. Ideally the foster parent would remain involved with the infant as a “foster aunt, godmother” to prevent the abrupt changes that are so detrimental in the child’s first years (Dozier et al., 2013, p. 169).

**Infant Development in Contexts Beyond the Family**

Infants spend most of their time within the family context, but they are not completely isolated from other influences. Many infants and toddlers spend at least part of their day in the care of other people while their parents work. The larger world also plays a role through the influence of children’s cultural surroundings. An infant’s exposure to media should be limited because face-to-face interactions with a live person are much more important for development, but we can’t ignore the impact of this context on early development. The peer context in infancy and toddlerhood is different from what it will become later in development, but in this section we look at the early roots of peer relations as they are laid down in the first couple of years.
Nonparental Child Care

Reading all this information about mother-infant attachment may make you wonder whether mothers are the only ones who can or should take care of infants and young children. One argument made against the use of nonmaternal child care is that the quality of the child’s attachment to the mother might suffer. Although some parents are concerned that attachment to a child care provider will undermine the child’s attachment to them, infants are capable of forming more than one secure attachment.

The issue of early child care has been a controversial topic. Today the United States is one of only a few Western countries that do not provide universal, publicly funded child care for their citizens. One reason is a continuing belief that women should be at home taking care of their young children, but the reality is that over half of married mothers with children under the age of 6 are in the workforce (Cohany & Sok, 2007). Despite what some people think, most women work today out of necessity. Although many have jobs they enjoy and that give them a sense of identity and feelings of accomplishment, their paychecks are necessary because their partners’ salaries are too low to adequately support a family, their partners are unemployed, or the woman is the head of the household.

For these women, child care may consist of care by relatives, a nanny or babysitter, a day care home, or a day care center. Figure 7.1 shows the historical rates of maternal employment. As you can see, the likelihood of a woman’s being in the workforce increases as her children get older. The availability of child care is one important factor influencing whether a woman is employed outside the home. Figure 7.2 shows the types of child care used by mothers of young children. Each type has its strengths and weaknesses.

Figure 7.2 shows that about two-thirds of infants and toddlers are cared for by their parents or another relative, but what do we know about other care arrangements? In 1991, the National Institute of Child Health and Human Development (NICHD) began

Daycare. Research has found that high-quality child care does not interfere with a young child’s secure attachment to his or her parents. Children can form secure attachments to more than one person. This is fortunate because most women who work outside the home do so out of necessity.
FIGURE 7.1  U.S. women in the workforce

The number of mothers employed outside the home has steadily increased over the last 3 decades, until quite recently, but mothers with the youngest children have the lowest rates of labor force participation.


FIGURE 7.2  Child care arrangements used by U.S. mothers of children from age 0 to 3, 2013

Mothers of infants and toddlers need to rely on a variety of child care arrangements to care for their children while they are at work.

a large longitudinal research project at 10 locations across the United States designed to examine the effects of early nonmaternal child care on child development. It found that insecure attachment to the mother was first and foremost linked to insensitive mothering rather than to whether the child was in nonmaternal care. However, three factors magnified the negative effect of insensitive mothering: (1) The quality of the nonmaternal care also was poor, (2) the infant spent more than 10 hours a week in care, or (3) the infant had experienced more than one child care arrangement within his or her first 15 months (Belsky, 2005; NICHD Early Child Care Research Network, 1997).

Interestingly, in a different study, infants with difficult temperaments were more likely to have secure attachment with their mother when they spent more of their time in out-of-home care (McKim, Cramer, Stuart, & O’Connor, 1999). Perhaps when mothers got a break from these difficult infants, they were able to provide the care they did give with more enthusiasm.

Clearly the quality of child care can have an impact on attachment and emotional development overall, but what is high-quality care? In 2013, Child Care Aware of America surveyed state program requirements and how well programs complied with these requirements. The benchmarks used to rate the states are found in Table 7.5 on the next page.

Although there are high-quality child care settings that meet these standards, many others have been found inadequate for providing for even the basic needs of children, especially children from low-income families (Forry et al., 2012; Shonkoff & Phillips, 2000). Child Care Aware of America graded each state on their benchmarks and found that no state earned an A or B, 10 states earned a C, 21 earned a D, and the remaining 20 states failed (Child Care Aware of America, 2013b).

The National Association for the Education of Young Children recommends that there be one caregiver to every four infants between the ages of 6- to 18-months. However, each state sets its own standards for how many children may be cared for in a group and how many caregivers must be there. State regulations for adult:child ratios range from 1:3 to 1:6 for infants 6 to 9 months old and between 1:3 and 1:9 for 18-month-olds (Child Care Aware of America, 2013a). If you have ever cared for just one infant, you know what a difficult job it can be. The goal for high-quality care is to keep this ratio as low as possible.

Early childhood educators earn less than parking lot attendants, cooks, and cashiers and child care teachers earn about one-third of the salary of a public school kindergarten teacher, although both have a similar level of education (Porter, 2012). Consequently in many child care centers, staff turnover is a great problem. The average annual turnover rate for teaching staff in child care settings is 30% (Porter, 2012), which gives child care one of the highest rates of turnover of any profession. When child care workers receive a living wage and health care benefits, they stay longer at their jobs (Shonkoff & Phillips, 2000). This is important because consistency of care allows a caregiver to get to know the infant and the infant to become attached to the caregiver. High rates of staff turnover also have a negative impact on children’s social, emotional, and language development (Korvenivitch & Dunifon, 2010).

The reality is that many parents of infants and toddlers need to work outside the home, and the availability of high-quality care of their children is essential. For this reason, we need to continue to build a well-qualified workforce in early care and education that can provide the consistent, stimulating, and warm environment in which young children can thrive.

How Parents Transmit Culture to Infants

How do children learn about the culture into which they are born? Certainly some cultural expectations are explicitly taught to children, but much cultural information is conveyed in more subtle ways. One way in which cultures vary is along the continuum from individualism to collectivism. U.S. values are based on rugged
TABLE 7.5 Benchmarks used to assess state requirements for child care programs and oversight of compliance.

Program benchmarks:

1. A comprehensive background check is required, including using fingerprints to check state and FBI records, checking the child abuse registry and checking the sex offender registry.
2. Child care center directors are required to have a bachelor’s degree or higher in early childhood education or a related field.
3. Lead teachers are required to have a Child Development Associate (CDA) credential, college courses in early childhood education or an associate degree in early childhood education or a related field.
4. Child care center staff are required to have an orientation and initial training in child development, child guidance, child abuse prevention, emergency preparation, licensing regulations, learning activities, health and safety, safe sleep, shaken baby prevention, CPR, and first aid.
5. Child care center staff are required to have 24 hours or more of annual training in child development, child guidance, child abuse prevention, emergency preparation, licensing regulations, learning activities, health and safety, safe sleep, shaken baby prevention, CPR, and first aid.
6. Child care centers are required to plan learning activities that address language/literacy, dramatic play, active play, cognitive development, self-help skills, creative activities, limited screen time, social development, emotional development and culturally sensitive activities.
7. Child care centers are required to follow recommended health practices in 10 specific areas: hand washing/diapering/toileting, nutritious meals and snacks, immunizations, exclusion of ill children, universal health precautions, administration of medications, toxic/hazardous substances, sanitation, weekend/evening care, and incident reporting.
8. Child care centers are required to follow recommended safety practices in 10 specific areas: SIDS prevention, discipline/guidance, fire drills, outdoor playground surfaces, emergency plans, electrical hazards, water hazards, supervision, transportation supervision, and firearms (prohibited or access controlled). Corporal punishment is prohibited.
9. Child care centers are required to encourage parent involvement, including regular communication with parents, total parental access to the center and to all written policies.
10. Staff:child ratio requirements comply with NAEYC* accreditation standards for seven age groups.
11. Group size requirements comply with NAEYC accreditation standards in seven age groups.

Oversight benchmarks:

1. Child care centers are inspected at least four times per year, including visits by licensing, health, and fire personnel.
2. Inspection and complaint reports are available to parents on the Internet.
3. Programs to licensing staff ratio does not exceed 50:1.
4. Licensing staff have a bachelor’s degree in early childhood education or a related field.


NOTE: *NAEYC is the National Association for the Education of Young Children.

individualism. Our heroes often are those who are self-made and managed to rise from deprived circumstances to become successful, and people are admired for being independent and autonomous. In other cultures, the emphasis is more on an obligation to those around you: your family or your group, however you define it. These values are communicated from parent to child even before the child can speak. For example, in many collectivistic cultures around the world, the value of connection to others is communicated in infancy because babies are constantly kept close to the
mother’s body, sleeping with her while she anticipates the baby’s needs. Contrast this with individualistic cultures in which babies are expected to sleep through the night in their own bed and are praised for soothing themselves when they cry (Greenfield, Keller, Fuligni, & Maynard, 2003).

Robin Harwood was interested in how the individualistic values of U.S. society and the more collectivist values of Puerto Rican society might be taught even to infants through the way their mothers interacted with them. Harwood and her colleagues set out to see whether the feeding practices of mothers in the two cultures reflected different value systems (Miller & Harwood, 2002). Think about the scene you expect to see when a mother feeds her 1-year-old baby. If you were born in the United States, most likely you have an image of the baby sitting in a high chair. The mother spoon-feeds the baby but often lets the baby take the spoon to begin learning to feed herself, usually with messy and somewhat hilarious results, as shown in the leftmost photo on this page. She may also put some “finger food,” like dry cereal, on the tray for the baby to take on her own. Contrast this picture with that of the typical Puerto Rican mother and baby. This mother feeds the baby to make sure the baby eats well, with the feeding remaining under her control and not the baby’s, as shown in the photo at the right.

What subtle message is each mother giving her baby from the earliest days of life? The American mother is saying, “Be independent. Learn to do things on your own separately from me. We will watch and praise you.” The Puerto Rican mother is saying, “Be close to family. Listen to and cooperate with your parents. Enjoy your food in the context of family love and expectations for proper behavior.” Thus, cultural values are translated directly into parenting techniques. Babies are learning the values of their culture even with their first bites of food.

Although we have emphasized the comparison between individualism and collectivism in different cultures in this particular example, it is clear that all people have both individual and social needs and all cultures acknowledge both aspects of life. However, they may do so in different ways. For example, in Western cultures parents encourage their children to interact socially because the children choose to do so. In
Latino cultures, parents expect children to interact socially as an expression of the obligation to promote the well-being of the group as a whole (Raeff, Greenfield, & Quiroz, 2000).

**Development of Peer Relationships**

From infancy onward, there is something qualitatively different and special about children’s interactions with other children their own age. When a child interacts with adults and even older children, the older people are largely in charge of the interactions, both because they are more powerful and because they can keep the interaction going in spite of the young child’s less-developed social abilities. Peer interactions are different because children must work out how to maintain the relationship themselves, at their own level of social and cognitive functioning. Another reason the relationship between peers is special is that peers are often more fun and exciting (Dunn, 2004). Mom and Dad will tire of “chase me” games long before two toddlers do. Preschoolers may share a deep interest in dinosaurs that the adults in their lives encourage but do not necessarily share.

What is the youngest age at which children are able to interact in a meaningful way with peers? While most people are very aware that preschoolers are able to play with other children, they often believe infants and toddlers are not yet capable of real peer relationships. However, there is some evidence that even before age 2, infants can form relationships with other children. Babies are often very interested when they see other babies, smiling at them and trying to touch them (Hay, Caplan, & Nash, 2009). Near the end of their first year of life, infants want to be near other young children, seek them out, and engage in a number of behaviors such as offering their toys that are meant to draw them into a social interaction (Williams, Ontai, & Mastergeorge, 2010). By their second year, infants bring reciprocity into their peer interactions as they imitate what other children are doing.

As young children develop language, they add this new ability to their interactions. Language allows them to begin to coordinate their activities in a more cooperative way, planning what they will do together or solving problems as they arise (Eckerman & Didow, 1996; Howes & Matheson, 1992). Language also indicates that children are developing the ability to use symbols, and this ability leads to pretend play. Now, instead of using just their bodies to imitate each other’s behavior (“I see you jump and it looks like fun, so I jump”), they can begin to arrange a tea party, with pretend tea and cookies, or other make-believe games.

In a variety of ways, adult caregivers help infants and toddlers develop early social skills in a cultural context by scaffolding their social behaviors (Williams, Mastergeorge, & Ontai, 2010). This scaffolding can take a direct, adult-centered form, such as moving an infant away from another infant or telling the child what the social rule is, and it also can be more child-centered. A child-centered approach follows the lead of the child so, for instance, a caregiver might help an infant who is looking at peers to approach a peer group and join it or might express to the infant what another
child is feeling (for example, “Curtis was playing with that toy and now he seems angry that you tried to take it away from him”).

All relationships have their conflicts, and relationships with peers are no exception. Adults who work with toddlers know “Mine!” and “No!” are two of their favorite words. Especially when these words are linked with hitting or biting, adults are not likely to see them in a positive light. However, as we noted at the beginning of this chapter, being able to use these words reflects some positive aspects of toddlers’ development. Claiming toys indicates a developing sense of self as an individual (Levine, 1983; Rochat, 2011). In addition, conflicts are not just about possessing objects. They also reflect a new social awareness. Research has shown that toddler conflicts are reciprocal in nature (Hay, Hurst, Waters, & Chadwick, 2011; Hay & Ross, 1982)—that is, “If you take my toy, the next time I see you, I will take yours.” This becomes part of the way that children learn how to make friends. If you want someone to play with you, you will not succeed if you take his toy.

The nature of children’s attachment relationships with their parents is another important influence on their ability to develop close relationships with peers. Toddlers and preschoolers who have secure attachments to their parents receive more positive responses from peers (Fagot, 1997). In one large study, children who had secure attachments to their mothers at age 3 were more likely to have high-quality friendships in third grade (McElwain, Booth-LaForce, Lansford, Wu, & Dyer, 2008), while insecurely attached children became increasingly withdrawn from their peers (Booth-LaForce & Oxford, 2008). It appears that children who have secure attachments to their parents have a higher sense of self-worth, and this translates into more confident interactions with peers (Booth-LaForce et al., 2006). However, relationships with peers also play an independent role in children’s development, and the quality of relationships they develop will further affect many aspects of their lives.

Check Your Understanding

1. How can divorcing or separated parents minimize negative effects on infants and toddlers?
2. What is an open adoption?
3. How do parents transmit culture to infants?
4. What do we know about the effect of media exposure on infants and toddlers?
5. How do infants and toddlers develop peer relationships?

Conclusion

By the end of infancy, infants have started to develop a sense of self and are learning to express and control their emotions as guided by caring adults. They have established important relationships that will shape and influence many aspects of their lives as they develop. Most have established a secure attachment to their primary caregivers and are prepared for the world of peers and play they will encounter as they move into early childhood.
Chapter Summary

7.1 What are emotion and temperament?
The experience of an emotion includes your body’s physiological reaction to a situation, your interpretation of the situation, communication of the feeling to another person, and your own actions in response to the feeling. Although basic emotions appear to be universal, the way we express them can differ from one culture to another. One of the ways we learn how to react in an ambiguous situation is through social referencing. Temperament is the general way in which we respond to experiences in the world, such as being timid or fearless. Infant temperaments have been characterized as easy, difficult, or slow-to-warm.

7.2 How do infants and toddlers develop a sense of self?
Infants have little self-awareness, but within the first 2 years of life, they develop the ability to recognize themselves in a mirror, to use the pronouns I and you correctly, and to understand that other people see the world differently than they do, called visual perspective taking. They also become possessive of their toys.

7.3 How does attachment develop?
Attachment is a strong, positive emotional bond with a particular person who provides a sense of security. It is adaptive because it provides children a safe place from which they can explore the environment and learn. According to John Bowlby, attachment develops in four stages: preattachment (birth to 6 weeks), attachment in the making (6 weeks to 6–8 months), clear-cut attachment (6–8 months to 18 months–2 years), and goal-corrected partnership (or formation of reciprocal relationships; 18 months on). Stranger anxiety typically appears during the stage of attachment in the making and separation anxiety appears during the stage of clear-cut attachment. As the result of the attachment process, we develop an internal working model of relationships that we carry with us into new relationships. Based on response to Mary Ainsworth’s Strange Situation, the infant’s attachment can be classified as secure, anxious avoidant, anxious ambivalent/resistant, or disorganized/disoriented. Although the percentage of infants with secure attachment does not differ much among cultures around the world, what constitutes sensitive parenting and security in infancy does. Individuals can change their type of attachment as a result of their later life experiences. Children are capable of forming a secure attachment to more than one person at a time. High-quality child care does not harm children’s attachment to their parents, but poor-quality child care can interact with poor mothering to create less secure attachment. A reactive attachment disorder occurs in children deprived of a consistent caregiver or abused early in their lives. They withdraw from emotional connections to people. In disinhibited social engagement disorder children attach indiscriminately to anyone.

7.4 What other life experiences shape infants’ development?
Families may take many forms, including divorced parents, grandparents raising their grandchildren, adoption, and foster care. Each of these may pose risks and opportunities for infant development. Many infants spend much of their day in the care of adults other than their parents and will be affected by the quality of that care. Media use has not been shown to benefit the cognitive development of infants and toddlers. Even before they are 2 years old, infants are interested in other children and try to engage them socially. Infants who already have a secure attachment with their caregivers receive more positive responses from peers.

Key Terms

- Anxious ambivalent/resistant attachment 229
- Anxious avoidant attachment 229
- Attachment 224
- Attachment in the making 226
- Clear-cut attachment 226
- Difficult temperament 219
- Disinhibited social engagement disorder 236
- Disorganized/disoriented attachment 229
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- Empathy 218
- Foster care 240
- Goal-corrected partnership 226
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