CHAPTER 4

Self-Development

It is almost certain that people everywhere have a concept of self. The way they think about themselves differs, of course, but for several thousand of years at least, people have been aware of their own continued existence and have thought about what they are like (Jaynes, 1976). Understanding how these ideas develop and change with age is the focus of Chapter 4.

The chapter begins by covering three theories of self-development. The first of these theories is sociological in nature; the second is cognitive in nature; and the third emphasizes interpersonal and emotional processes. In combination, these perspectives help us understand the development of the self.

The next section of this chapter examines the origins of self-awareness in humans and animals. For centuries, self-awareness was thought to be a uniquely human capacity. Recent research has challenged this assumption, providing suggestive evidence that other species besides humans possess self-awareness. There is also evidence that self-awareness emerges in humans at a very young age and may even be present at birth.

The final section of this chapter examines developmental shifts in self-understanding. Although the greatest developments in the self occur during our early years, people's thoughts about themselves change throughout life. Changes that occur during adolescence are particularly noteworthy, and we will cover this period of life in some detail.

One more word before we begin. For the most part, this chapter will focus on how people's *thoughts* about themselves develop and change. A thorough discussion of the origins and development of *self-esteem* (an examination of how people's *feelings* toward themselves develop and change) will be delayed until Chapter 8.

THEORIES OF SELF-DEVELOPMENT

Mead's Symbolic Interactionism Theory

The first theory we will consider was offered by the American sociologist, George Herbert Mead. Actually, we have already encountered some of Mead's ideas when we considered Cooley's (1902) notion of the looking-glass self (see Chapter 3). Cooley argued that people's feelings toward themselves develop through a perspective-taking process: We imagine how we are regarded by other people, and we feel good or bad in accordance with that imagined judgment.

Mead greatly extended these ideas.[1] Whereas Cooley had linked perspective taking to the development of self-related *feelings*, Mead believed that perspective taking comprised the very genesis of the self. The basis for these ideas resides in a theory known as symbolic interactionism (for reviews of this theory, see Hewitt, 1997; Meitzer, Petras, & Reynolds, 1975; Stryker & Statham, 1985). Symbolic interactionism is concerned with understanding the socialization process. How is culture acquired and perpetuated? How do people come to adopt the values, standards, and norms of the society into which they are born? In short, how are individuals transformed from asocial creatures at birth into socialized beings?

Perspective Taking, Socialization, and the Emergence of Self

Mead (1934) believed that the emergence of self provides the key to understanding this metamorphosis. Mead argued that individuals become socialized when they adopt the perspective of others and imagine how they appear from other people's point of view. For Mead, this perspective-taking ability is synonymous with the acquisition of self.

To illustrate, imagine a very young child is scribbling on the walls with a crayon. Because the child is not yet able to ask, "I wonder what mom and dad would think of my behavior?" the child is not acting with reference to self and is not acting in a socialized manner. As the child matures, this ability to adopt the perspective of others toward the self develops ("I bet mom and dad wouldn't be happy with what I'm doing to the walls"). According to Mead,

this capacity to imagine how we appear in the eyes of others heralds the emergence of self. When we are further able to modify our behavior to conform to the perceived wishes of others, we are socialized beings.

Symbolic Communication and the Development of Self

Mead also speculated about how this perspective-taking ability develops. "How can an individual get outside himself," he asked, "…in such a way as to become an object to himself" (1934, p. 138). Mead believed that interpersonal communication, particularly the use of symbolic communication in the form of language, was the key to understanding this "essential problem of selfhood."

Mead based his analysis on Darwin's theory of the evolution of emotional expressions. In his book *Expression of the Emotions in Man and Animals*, Darwin (1872) asserted that certain emotional states are associated with specific bodily and facial expressions. For example, anger is associated with a baring of theteeth. Darwin believed that these facial expressions reveal something about the inner state of the animal. They serve as a sign of what the animal is feeling and indicate what the animal is likely to do. In this sense, these gestures (as Mead called them) constitute a form of communication; they let other animals know what is about to occur.

Communication in lower animals is largely instinctive. An angry wolf doesn't ask itself, "How can I let this other wolf know I'm angry?" It instinctively bares its teeth and communicates the internal state. Humans also communicate through instinctive facial expressions (Ekman, 1993), but these displays represent only a small portion of human communication. People also communicate symbolically, using *significant* gestures. (In this context, the word *significant* means "having the qualities of a sign.") In order to do so, Mead argued, we must adopt the perspective of the other person toward ourselves and imagine how our gestures will be regarded by that person. For Mead, this perspective-taking ability is synonymous with the acquisition of self.

To illustrate, imagine that I want you to know that you are welcome in my home. How can I communicate this information to you? According to Mead, I need to put myself in your shoes and ask myself, "What behavior or gesture on my part would let you know that you are welcome here?" After engaging

in this process, I might conclude that opening up my arms in the form of a hug would do the trick. This gesture would signify (have the qualities of a sign) that you are welcome. In this fashion, the need to adopt the perspective of others in order to communicate with symbols creates the self in Mead's theory.

Social Interaction and the Development of Self

It is important to note the strong emphasis Mead gives to social interaction in his analysis of the development of self. In the absence of social interaction, symbolic communication would be unnecessary and the self would not develop through the perspective-taking process Mead describes. For Mead, then, social interaction is essential to the emergence of self.

Once the self has developed, however, it continues to exist even when others are not around. This is the case because people can mentally represent others and imagine how their behavior would appear in another person's eyes. Most people, for example, do not steal items from a store even when no one is around to watch them. One explanation is that they mentally represent how others would react to their behavior if they were present, and behave accordingly. In more general terms, we can say that once people acquire a self and are socialized, they internalize the anticipated reactions of others and continue to act in a socialized manner even when they are alone. But they would not develop this capacity, Mead argued, if they were not raised in social surroundings.

> The self, as that which can be an object to itself, is essentially a social structure, and it arises in social experience. After a self has arisen, it in a certain sense provides for itself its social experiences and we can conceive of an absolutely solitary self. *But it is impossible to conceive of a self arising outside of social experience*. When it has arisen, we can think of a person in solitary confinement for the rest of his life, but who still has himself as a companion, and is able to think and to converse with himself as he had communicated with others. (Mead, 1934, p. 140, emphasis added)

This doesn't mean that people are always acting in a self-conscious and socialized fashion. Sometimes people act without reference to self, without looking back on themselves from the (imagined) perspective of others. If, for example, we are walking along, mindlessly humming a tune, we are not, in Mead's scheme, acting with reference to self. Only when something happens that causes us to become the object of our own attention (e.g., someone calls our name) are we swept out of our unsocialized reverie back into the self-

conscious state that is socialized behavior.

The Generalized Other

To this point, we have been concerned with the individual's ability to adopt the perspective of another person toward the self. When this capacity emerges, the self develops. Ultimately, Mead argued, socialization requires more than the ability to adopt the perspective of a *particular* other toward the self; to be truly socialized, people must come to adopt the perspective of society at large. We must view ourselves through the eyes of an abstract, generalized other that represents the broader society and culture into which we are born.

Mead believed the foundation for this ability could be found in the type of games children play. Initially, young children play in an asocial manner. Their play is entirely autonomous and does not involve others. In time, children play with particular others. Sometimes these are imaginary playmates who take turns "speaking to one another." Mead believed this form of play was very important for the development of self, as it requires adopting the perspective of a particular other and seeing yourself from the other person's point of view. Role-playing is also characteristic of children at this stage. For example, a child may play "firefighter" and mimic the behaviors and language of a firefighter. This also involves the ability to adopt the perspective of a particular other and lays the groundwork for the development of self.

The game stage is the next stage in Mead's analysis. In the game stage, there are multiple others and the individual must simultaneously be aware of many people's perspectives. Mead used the game of baseball to illustrate this stage.

> The child who plays in a game must be ready to take the attitude of everyone else involved in that game… . If he gets in a [baseball game] he must have the responses of each position involved in his own position. He must know what everyone else is going to do in order to carry out his own play. He has to take all of these roles. They do not all have to be present in consciousness at the same time, but at some moments he has to have three or four individuals present in his own attitude, such as the one who is going to throw the ball, the one who is going to catch it, and so on. … In the game, then, there is a set of responses of such others so organized that the attitude of one calls out the appropriate attitudes of the others. (Mead, 1934, p. 151)

The key difference, then, between play and the game is that in the former the child adopts only the attitudes of one other person, but in the latter the child

adopts the attitudes of many other people.

Ultimately, the ability to adopt multiple perspectives toward the self prepares the individual to adopt the perspective of an abstract, generalized other that represents the society at large. When this occurs, the self is said to be fully developed and socialization is complete.

> If the given human individual is to develop a self in the fullest sense, it is not sufficient for him merely to take the attitudes of other human individuals toward himself… ; he must also … take the attitude of the generalized other toward himself. Only insofar as he takes the attitudes of the organized social attitudes of the given social group or community to which he belongs, does he develop a complete self, (paraphrased from Mead, 1934, pp. 155–156)

> [Thus] there are two general stages in the full development of the self. At the first of these stages, the individual's self is constituted simply by an organization of the particular attitudes of other individuals toward himself… . But at the second stage in the full development of the individual's self, that self is constituted not only by an organization of these particular individual attitudes, but also by an organization of the social attitudes of the generalized other… . So the self reaches its full development by organizing these individual attitudes of others into the organized social or group attitudes. (Mead, 1934, p. 158)

Cognitions, Not Emotions, as Central to the Self

Another important aspect of Mead's theory is its emphasis on cognitive rather than affective processes. In Chapter 3 we noted that Cooley emphasized the development of self-feelings. In fact, feelings were paramount throughout his analysis. "There can be no test of the self," Cooley wrote, "except the way we feel" (1902, p. 172). This emphasis on emotion also characterized William James's (1890) treatment of self (see Chapter 2).

Mead offered a very different view of the self. For Mead, cognition, not emotion, is the central element of self.

> Emphasis should be laid on the central position of thinking when considering the nature of the self. Self-consciousness, rather than affective experience … , provides the core and primary structure of the self, which is thus essentially a cognitive rather than an emotional phenomenon… . Cooley and James, it is true, endeavor to find the basis of the self in … affective experiences, i.e., in experiences involving "self-feeling"; but the theory that the nature of the self is to be found in such experiences does not account for the origin of the self… . The individual need not take the attitudes of others toward himself in these experiences. The essence of the self … is cognitive… . (Mead, 1934, p. 173)

Piaget's Model of Cognitive Development

With its emphasis on perspective-taking ability and the acquisition of language, Mead's model assumes that self-development requires a good deal

of cognitive sophistication. Cognitive abilities are also the focus of Piaget's (1952) theory of child development. Although his theory is a general theory of cognitive development and is not explicitly concerned with self-development, researchers have applied many of Piaget's insights to the study of the self.

As is widely known, Piaget developed his theory by observing the way his own children attempted to solve various problems. On the basis of these observations, Piaget concluded that human cognitive development proceeds through a series of stages. Each stage is characterized by qualitatively distinct ways of understanding the world. This understanding changes very little within each stage, but it changes abruptly across stages. Transitions from one stage to another are brought about by cognitive and physical maturation.

Sensory-Motor Stage

The first stage in Piaget's theory is the sensory-motor phase (first 15 months).[2] This stage is characterized by extreme egocentrism, in that children's knowledge is centered on their own thoughts and feelings. This stage could also be called the prerepresentational stage, as children at this stage have yet to fully develop representational thought. Representational thought involves the ability to mentally represent people, places, and events. With this ability, one can consider events not currently taking place and think about people and objects not presently in sight.

The lack of representational thought at this stage is inferred from tests of object permanence. If we show a very young infant an object and then cover or otherwise hide the object, the infant shows no sign of knowing that the object continues to exist even when it is hidden from view ("out of sight, out of mind"). This capacity emerges by the end of the sensory-motor phase. At this point, children will search for the hidden object, suggesting that they know the object continues to exist even when it cannot be seen.

Preoperational Stage

The second stage in Piaget's scheme is the preoperational stage (15 months to 6 years). Although children at this age remain embedded in their own point of view, they begin to develop the ability to think abstractly (i.e., they are able to use symbols to represent things). This capacity greatly facilitates the

acquisition of language.

The ability to think abstractly is also reflected in the emergence of imaginary play. Recall that Mead believed that imaginary play was central to the development of self and progressed through a series of stages. Research using Piaget's model largely supports Mead's conjecture (Bretherton, 1984; McCune-Nicolich, 1981). At first, imaginary play involves only self-directed actions (e.g., the child pretends to feed herself). This is consistent with the egocentrism that characterizes this stage of life. Later, between 15 and 21 months of age, children begin to include others in their imaginary play. For example, a child may pretend to "feed her kitty-cat." Between 19 and 24 months, turn taking in imaginary play emerges. Here, the child combines action sequences and switches between one role and another. Pretend play continues to become increasingly more elaborate until about 6 years of age, when it starts to abate.

Concrete Operational Stage

The third stage in Piaget's model is the concrete operational stage (6 years to 11 years). Thinking during this stage becomes increasingly logical with respect to time, space, and number. It is at this stage when (most) children stop believing in Santa Claus and the Tooth Fairy, simply because it isn't *possible* for one person (or fairy) to visit everyone in a single evening! Children at this stage also understand that sequences can be reversed, and they use this knowledge to demonstrate conservation (i.e., they understand that the amount of water in a tall, thin glass may be equal to the amount of water in a short, wide glass).

Formal Operations Stage

The final stage in Piaget's model is the formal operations stage (11 years and up). One of the hallmarks of this stage is the ability to think about hypothetical events and situations. For example, when attempting to solve a problem, young adolescents at this stage are able to ask, "What would happen if I did X?" Individuals at this stage are also able to effectively use inductive and deductive reasoning. These cognitive advances help free people from their egocentric point of view, as individuals are now capable of imagining that others might have a perspective on matters that is different than their

own.

Erikson's Model of Psychosocial Development

Psychoanalytic models offer a third approach to understanding the development of the self. While recognizing the importance of social interaction and cognitive development, these models emphasize affective factors as well, presenting a more dynamically charged account of self-development.

There are a number of such theories (see, for example, Mahler, Pine, & Bergman, 1975), but the most influential theory for the study of the self is Erikson's (1963) model of psychosocial development. Along with Freud, Erikson assumed that particular needs arise at particular stages of life. If these needs are met, development proceeds to the next stage; if these needs are not met, development stagnates or regresses. For Freud, these needs were somatic in nature (e.g., anal gratification; oral gratification). In his award-winning book *Childhood and Society*, Erikson (1963) modified Freud's ideas to include eight needs of a more psychological nature. Each of these needs has particular relevance to how people think and feel about themselves.

Table 4.1 shows that the first issue an infant faces is the capacity to trust others, particularly the mother. Trust is established when the infant receives warm, consistent care; mistrust develops when care is inadequate or unpredictable. These initial feelings of trust or wariness set the stage for subsequent interpersonal relationships. Individuals who do not develop trust at this stage may have difficulty getting close to people throughout life.

TABLE 4.1. Erik Erikson's Eight-Stage Model of Psychosocial Development

Stage of Life	Psychosocial Conflict	Characterization
First year	Trust vs. Mistrust	Trust develops when infants receive warm, consistent care; inadequate or unpredictable care instills mistrust.
1–3 years	Autonomy vs. Shame and Doubt	Feelings of autonomy develop when children are encouraged to explore themselves and their environment. Feelings of shame and doubt arise when children's natural inclination to explore is thwarted.
3–5 years	Initiative vs.	Initiative is fostered when children are given the freedom to try (and

	Guilt	fail) at various activities. Parents instill guilt by ridiculing their children or by being overly critical of them.
6–12 years	Industry vs. Inferiority	Children learn a sense of industry when they are praised for producing socially valued goods or for performing socially valued services. Feelings of inferiority result if these efforts are regarded as inadequate or inferior.
Adolescence	Identity vs. Role Confusion	The need to answer the question, “Who am I?” is the critical issue people face at this stage of life. Those who forge a dependable and integrated identity are said to be identity achieved; those who fail to establish a consistent and unified identity suffer from role confusion.
Early adulthood	Intimacy vs. Isolation	Erik son regards the need to establish a committed and intimate interpersonal relationship to be the cri tical issue people face at this stage of life. Failure to do so leads to feelings of loneliness and isolation.
Middle adulthood	Gcncrativity vs. Stagna lion	Genera tivity involves the belief that one is a productive member of society, contributing in a meaningful way and helping to build future generations. This can be accomplished through work, volunteer efforts, or child rearing. The alternative is stagnation, which is characterized by an excessi ve concern with one’s own welfare or a belief that life is meaningless.
Late adulthood	Integrity vs. Despair	Integrity is achieved when one is able to look back on one’s life with acceptance and satisfaction. The belief that things have gone as they should allows people to face death with dignity. If regret dominates, people feel despair.

Issues of independence and mastery assume importance during the second stage of life. Feelings of autonomy develop when children are given the freedom to explore themselves and their environment. Feelings of shame and doubt arise when children’s natural inclination to explore is thwarted or subverted.

During the third stage of life, children strive to actively manipulate (rather than simply explore) the environment. Feelings of initiative arise when children are allowed to create, construct, and modify their world (e.g., to build things; to draw or paint). Feelings of guilt arise if parents ridicule or are overly critical of their child’s efforts to modify the environment.

The fourth stage of life coincides with the beginning of formal education. Erikson characterizes this stage in terms of a conflict between feelings of

industry and inferiority. The term industry refers to the child's ability to master socially appropriate tools and skills. It is an apprenticeship period, during which the child learns to assume adult responsibilities. Those who do so successfully, Erikson argued, acquire a sense of industry; they learn to "win recognition by producing things" (1963, p. 259). Those who do not, develop feelings of inferiority.

The next stage of life is adolescence. According to Erikson, the adolescent faces an *identity crisis* as he or she confronts the need to answer the question, "Who am I?" Adolescents who forge a dependable and integrated identity are said to be identity achieved; those who fail to establish a consistent and unified identity suffer from role confusion.

Erikson regards the need to establish an intimate interpersonal relationship to be the central issue people face during early adulthood. At this stage of life, many (though not all) individuals enter into a committed and lasting relationship. Failure to do so leads to feelings of loneliness and isolation.

In middle adulthood, the paramount issue is the perception that one is a productive member of society, contributing in a meaningful way and helping to build future generations. This can be accomplished through work, volunteer efforts, or child rearing. The alternative is stagnation, which is characterized by an excessive concern with one's own welfare or a belief that one's life is essentially meaningless.

The final issue individuals face in late adulthood is labeled "integrity versus despair." Integrity is achieved when one is able to look back on one's life with acceptance and satisfaction. It is the belief that one's life is something that "had to be and that, by necessity, permitted of no substitution" (Erikson, 1963, p. 268). This belief allows a person to face death with dignity. If regret dominates, the person feels despair and is afraid of dying.

To summarize, Erikson proposed an eight-stage model of psychological development. At each stage, individuals confront an important self-relevant issue. The model is not perfect. It is culturally bound and rigid with respect to the sequence of stages it describes (e.g., many people now marry later in life than they used to and, therefore, may encounter issues of generativity before confronting issues of intimacy). These limitations should not blind us to the importance of Erikson's work, however. Erikson acknowledged that the conflicts he describes can resurface throughout life and may never be entirely

resolved. In this sense, it’s best to think of these conflicts as general issues people face in their lives, rather than as a fixed sequence that everyone experiences in the same order.

THE COURSE OF SELF-DEVELOPMENT

Having outlined three theoretical models, we are ready to look at how researchers have used these ideas to understand the emergence and development of the self. Our discussion will be organized around four questions: (1) Is self-recognition a uniquely human capacity? (2) At what age does self-recognition emerge in humans? (3) Are the origins of self-awareness present at birth? and (4) How do people's ideas about themselves change during childhood?

The first three questions concern the genesis and development of the I; the fourth question concerns the developmental course of the *ME*. Accordingly, let's begin by reviewing the distinction we've made between these two aspects of self. The I refers to our sense that we are a distinct and unified entity, continuous over time and capable of willful action. The *ME* refers to our more specific ideas about what we are like. These ideas include beliefs about our physical appearance; social roles and relationships; and likes, values, and personality characteristics.

The development of the *I* precedes the development of the *ME*. Before we can know what we are like, we first need to know that we exist. To illustrate, imagine that someone has suddenly become aware of their own existence. If at this very moment we were to ask the person, "What are you like?" they would say "I don't yet know what I am like; I have only at this very instant become aware that I am." This is what we mean when we say that the development of the *I* precedes the development of the *ME*.

Visual Self-Recognition in Nonhumans

The first issue we will consider is the question of whether humans alone are capable of taking themselves as the object of their own attention. Mead believed that they were. In fact, Mead believed that this uniquely human capacity was the most important difference between humans and other animals.

> Man's behavior is such in his social group that he is able to become an object to himself, a fact which constitutes him a more advanced product of evolutionary development than are the lower animals. Fundamentally, it is this social fact—and not his alleged possession of a soul or mind with which he, as an individual, has been mysteriously and supernaturally endowed, and with which the lower animals have not been endowed—that differentiates him from them. (Mead,

1934, p. 137)

Mirror Recognition in Chimpanzees

In an ingenious series of experiments, Gallup (1977) tested whether animals other than humans are able to take themselves as an object of their own attention. Gallup's experiments used a mirror-recognition task, in which an animal's ability to recognize itself in a mirror was assessed. Gallup reasoned that mirror recognition implies the existence of a rudimentary self-concept, as it requires knowing that you and the image in the mirror are one and the same.

In an initial investigation, Gallup exposed chimpanzees to a full-length mirror and unobtrusively recorded their behavior over a 10-day period. At first, Gallup notes, the animal responds to the mirror image as if it were another chimpanzee. Gradually, this behavior is replaced by activities of a distinctively self-directed nature. For example, while looking into the mirror, the animal begins to groom parts of the body that cannot be seen directly and pick material out of its teeth. Gallup argued that this switch in behavior meant that the chimpanzees had come to recognize that the *animal* in the mirror was their own reflection.

Follow-up research provided even stronger support for this assertion. In a subsequent study, Gallup (1977) anesthetized each chimpanzee and, while they were unconscious, painted the uppermost portion of their eyebrow with a tasteless, odorless, red dye. The dye was applied so that it was visible to the chimpanzees only when they viewed themselves in a mirror. Upon awakening, the animals were again exposed to their mirror image, and the number of behaviors they directed to the spot where the dye had been applied was recorded. In comparison with their earlier behavior, Gallup found that the chimpanzees were over 25 times more likely to touch the spot where the dye had been applied when they saw their reflection in the mirror. Moreover, this increased activity did not occur among a control group of chimpanzees who were not given prior exposure to their mirror image. These findings imply that the experimental group had earlier learned to recognize themselves in a mirror and were aware that the red-stained image in the mirror was indeed themselves.

A number of investigations have now replicated Gallup's (1977) basic

results and have also tested whether other animals show signs of self-recognition (e.g., Meddin, 1979; Povinelli, Rulf, Landau, & Bierschwale, 1993). This research suggests that only two species besides humans (chimpanzees and orangutans) are capable of recognizing themselves in a mirror. For reasons not yet known, gorillas, despite being highly similar to humans, do not pass the mirror-recognition test.

The Social Bases of Self-Recognition

If we concede that self-recognition implies a concept of self (see Heyes, 1994, for a discussion of this issue), Gallup's findings challenge Mead's assertion that self-awareness is a uniquely human capacity. But what of Mead's more specific claim that self-awareness arises only in the context of social interaction? Must one have the opportunity to view oneself from the perspective of another before one can develop a concept of self?

Gallup (1977) conducted additional research to test this idea. He repeated his earlier experiments using chimpanzees who had been reared in isolation, without ever having seen another chimpanzee. If, as Mead claimed, social interaction is necessary to the development of self, chimpanzees who have never had the opportunity to view themselves through the "eyes of others" should fail to recognize themselves in the mirror. This is precisely what occurred. The chimpanzees reared in isolation showed no indication of knowing that they were the object in the mirror. Only after three months of social interaction did they begin to show signs of self-recognition. Although alternative explanations for these results can be generated (e.g., being reared in isolation may have created a general cognitive deficit), the data are in accordance with Mead's claim that the opportunity to adopt the perspective of others is critical to the development of self.

Visual Self-Recognition in Infants

A modified version of the facial mark test (sans anesthesia!) has been used to assess self-recognition in infants. Lewis and Brooks-Gunn (1979) conducted some of the most comprehensive research in this area. These researchers began by noting that mirror images contain two sources of self-relevant information: contingency cues (when "I" move, the person in the mirror also moves) and featural cues (the person in the mirror looks like "me"). To see

which of these sources of information is critical to self-recognition, Lewis and Brooks-Gunn added other recognition tasks. These included (1) still photographs (which provide only featural cues); (2) simultaneous video displays (which provide both featural and contingency cues as an infant sees herself on a TV screen while she moves); and (3) delayed video displays (which provide featural cues and delayed contingency cues).

The participants in Lewis and Brooks-Gunn's research were 9- to 36-month-old infants, and self-recognition was assessed in multiple ways, including (1) self-directed behavior (touching a mark on one's nose while looking in the mirror); (2) verbal pronouncements (referring to oneself with a proper noun or a personal pronoun); and (3) self-conscious emotions (responding with embarrassment when viewing oneself but not when viewing others).

Using these various methods, Lewis and Brooks-Gunn found evidence for the following pattern of development. From 9 to 12 months of age, there is evidence of visual self-recognition with contingent stimuli. Most infants show signs of recognizing themselves when seeing themselves in a mirror or when viewing a simultaneous videotape display. They smile, attend to themselves intently, and touch their bodies. At this point, however, there is only limited and variable recognition of self with the noncontingent stimuli (i.e., the photographs and the delayed videotapes). These findings suggest that contingency is necessary for self-recognition at this stage of life.

At 15 to 18 months of age, most infants pass the facial mark test. When presented with their mirror image, they respond by pointing to the appropriate spot on their face where the rouge has been applied. Many 15- to 18-month-old infants are also able to distinguish themselves from others in photographs and to point to themselves in pictures. These findings suggest that contingency cues are no longer needed for self-recognition at this age.

These abilities continue to develop between 18 and 21 months of age. By this time, nearly all normally developed children are able to recognize themselves with contingent stimuli, and over three-fourths show evidence of self-recognition with noncontingent stimuli. Two-thirds of infants at this age also begin using personal pronouns when viewing photographs of themselves. By 21 months of age, self-recognition is well established.

Self-Awareness in the First Weeks of Life

Lewis and Brooks-Gunn's (1979) research suggests that visual self-recognition is apparent at nine months of age. Other researchers (e.g., Butterworth, 1992; Meltzoff, 1990; Neisser, 1988) have examined whether even younger infants possess self-awareness. These investigators do not rely on the visual recognition tests used by Lewis and Brooks-Gunn. They note that visual recognition demands a relatively advanced form of self-awareness; in order to recognize oneself in a mirror, one needs to have both self-awareness and an understanding of how mirrors work. For this reason, other measures are needed to determine whether self-awareness is present earlier in development.

Butterworth (1992) provided a review of this research. He began by distinguishing three aspects of self-awareness: (1) self-nonself differentiation (the ability to distinguish oneself from others and from the external world); (2) a sense of volition (comprehending that we can control some events but not others); and (3) perceived continuity of self over time (understanding that we have a stable existence). These aspects correspond to the three functions of the *I* we described in Chapter 1, and they accord with our definition of the *I* as "our awareness that we are a distinct and unified entity, continuous over time and capable of willful action."

Butterworth (1992) believes that infants come into the world with the *capacity* to make these discriminations. Among the findings he cites to buttress his claim are the following:

1. Newborns can visually orient themselves and maintain body postures in a changing environment, suggesting that self-world (self-environment) differentiation is present at birth.
2. Newborns cry harder to the sound of another infant's cry but not to the sound of their own cry, suggesting that self-other differentiation is present at birth.
3. Newborns rapidly learn to control the movements of objects and show delight when doing so, suggesting an early awareness that they can produce desired outcomes.
4. In newborns, the mouth anticipates the arrival of the hand, suggesting the presence of an innate body schema.

Imitation in Early Infancy

Research on imitation provides further support for the claim that self-awareness is present early in infancy. Imitation has long been thought to be integral to self-development. Cooley and Mead emphasized processes akin to imitation when they claimed that the self develops by taking the perspective of others: We put ourselves in other people's shoes and adopt their attitudes toward us. The role of imitation in self-development was made even more explicit by an earlier theorist, James Mark Baldwin, who wrote:

> My sense of myself grows by imitation of you, and my sense of yourself grows in terms of my sense of myself. Both [self] and [other] are thus essentially social; each is …an imitative creation. (Baldwin, 1897, p. 7)

Meltzoff and Moore (1977) studied facial imitation in infants who were 12 to 21 days old. An infant and an adult were brought together, and the adult made various faces (e.g., stuck his tongue out, pursed his lips together) while the infant watched. The infant's facial behavior was then recorded, and observers unaware of the adult's facial expression coded the infant's expression. There was clear evidence that infants imitated the faces they saw. A follow-up study (Meltzoff & Moore, 1993) found that imitation of this sort can be documented in 2- to 3-day-old infants!

Meltzoff and Moore (1994) discussed two explanations for these findings. One possibility is that the adult's facial expression *automatically* triggers a matching facial expression in the infant. This account is similar to a "reflex-arc" model, because it does not assume that any higher-order processes, including ones involving self-awareness, are implicated in imitative behavior. A second possibility is that newborns possess a rudimentary body schema that allows them to *deliberately* mimic the expressions they see. According to this account, infants see the adult's expression and are able to translate what they have seen into an expression of their own.

Research on these competing explanations is just beginning (Meltzoff & Moore, 1994), but the initial evidence provides support for the notion that facial imitation is deliberate rather than reflexive. On the basis of these and other findings, Meltzoff believes that the seeds of self-awareness are part of the infant's normal biological endowment:

> The young infant possesses an embryonic "body scheme" … [Although] this body scheme develops [with age], some body-scheme kernel is present as a "psychological primitive" right from the earliest phases of infancy. This nascent notion of self is a foundation from which self

development proceeds, not an endpoint that is reached after months or years of interaction with the social environment. (Meltzoff, 1990, p. 160)

Summary

It is important to underscore just what is and is not being claimed here. Butterworth and Meltzoff acknowledge that each of the effects we have discussed is subject to alternative explanations, and that none is sufficient to establish self-awareness in the neonate. Moreover, these theorists do not dispute the fact that self-awareness develops with age. Rather, they claim that the *basis* for self-awareness is present at birth. Infants possess an innate *capacity* to distinguish self from "not self," to recognize their ability to produce desired outcomes, and to coordinate their movements via an inchoate body schema. These findings suggest that newborns enter the world with a rudimentary sense of self that sets the stage for subsequent development. Social interaction and language may (as Mead claimed) be necessary for the complete development of the self, but they may not be necessary for its birth.

The Developmental Course of the ME

To this point we have been concerned with the development of the I, with the infant's awareness that it is a distinct and continuous entity. We have yet to consider the development of the ME. A focus on the *ME* would lead us to ask: How do people's thoughts *about themselves* change with age? For example, do 6-year-olds think of themselves differently than do 16-year-olds? Research in this area (for reviews, see Damon & Hart, 1988; Harter, 1983; Lewis & Brooks-Gunn, 1979) suggests the following developmental trends.

Early Childhood (Ages 2–6)

Gender and age appear to be the first characteristics applied to the self. By age two, most children correctly identify themselves as a boy or a girl, although they may not be fully aware that gender is constant until several years later (Harter, 1983). At this age, children also tend to describe themselves in terms of concrete, observable characteristics (e.g., I have brown hair; I have an older brother) and typical behaviors and activities (e.g., I play games; I like soccer). In short, young children tend to think of themselves in terms of their observable, verifiable characteristics.

Middle Childhood (Ages 7–11)

Several changes in self-descriptions occur during middle childhood. First, self-descriptions become more general. For example, instead of thinking of themselves in terms of specific activities (I like soccer; I like skating), children start applying broader labels to themselves (I like sports). Children at this age also begin defining themselves (and others) in psychological terms that emphasize perceived traits. Many of these qualities refer to important social characteristics (e.g., nice, likable, or friendly).

Cognitive maturity accounts for many of these changes. Middle childhood encompasses the concrete operational phase in Piaget's model. During this stage, children acquire the ability to think logically and to organize their thinking through the use of inductive reasoning. These abilities enable them to construct a more general view of themselves than was possible during early childhood.

Children at this age also acquire the capacity to take the perspective of others (in the manner specified by Mead) and to see themselves from another person's point of view. Social comparison processes also become more influential at this stage of life. Children compare themselves with others and draw inferences about themselves on the basis of what these comparisons show ("Jimmy has more trouble solving problems than I do, so I must be smart"). Before the age of six, social comparison is not thought to strongly influence the way children evaluate themselves (Ruble, 1983).

TABLE 4.2. Developmental Changes in Self-Descriptions

Stage of Development	Dominant Sel f-Descriptions	Examples	Parallels to James's Empirical Self
Early childhood (approximate ages: 2–6)	Observable, verifiable characteristics Specific interests and activities	I am a girl. I have brown hair. I have a younger brother. I like playing soccer.	Material self
Middle childhood (approximate ages:	General interests Use of social comparison	I like sports. I'm smarter	Social self

7–11)	Interpersonal qualities	than Meredith. I am nice.	
Adolescence (approximate ages: 12–18)	Hidden, abstract “psychological” qualities	I am moody. I am self-conscious.	Spiritual self

Adolescence (Ages 12–18)

Adolescence brings another shift in self-understanding. Adolescents define themselves in abstract qualities that emphasize their perceived inner emotions and psychological characteristics. For example, an adolescent might be inclined to say he is moody or insecure. These assessments reflect a more sophisticated, analytical approach to self-definition, one that emphasizes private qualities not necessarily known to others.

Table 4.2 summarizes these developmental trends in self-description. The table also shows the parallels between these stages and the three components of the empirical self discussed by William James (1890) (see Chapter 2). In early childhood, children emphasize the material self (physical attributes, possessions); in middle childhood, children focus on the social self (they use social comparison information and emphasize their interpersonal qualities); in adolescence, the focus is on the spiritual self (one’s perceived inner psychological qualities).

SELF-DEVELOPMENT ACROSS THE LIFE SPAN

Self-development is most rapid during infancy and early childhood, but people's ideas about themselves change (at least somewhat) throughout their lives. In the final section of this chapter, we will broaden our scope and look more closely at self-development across the life span.

The Developmental Course of Self-Evaluation

We will begin by considering age-related changes in the way people *evaluate* themselves. In Chapter 3 we noted that most people evaluate themselves in very favorable terms. Several investigators have examined whether this "positivity bias" is equally apparent at all stages of life.

An investigation by Ruble, Eisenberg, and Higgins (1994) sheds light on this issue. These investigators tested children at three age levels: 5–6, 7–8, and 9–10. Approximately half of the children succeeded or failed at an experimental task; the other half observed another child (of the same age and sex) succeed or fail at the task. The children then rated their own (or the other child's) ability.

At all three age levels, the children rated their own ability more favorably than they rated the other child's ability. Moreover, this tendency was especially pronounced given failure, leading Ruble and her colleagues to conclude that children's highly positive self-evaluations are driven by a desire to maximize feelings of self-worth.

Ruble et al. also found that self-evaluations were most favorable among the youngest children (5–6-year-olds) and least favorable among the oldest children (9–10-year-olds). This is a common pattern. Figure 4.1, which is based on the results of a number of studies (for reviews, see Demo, 1992; Eccles, Wigfield, Harold, & Blumenfeld, 1993; Marsh, 1989; Stipek, 1984), presents a schematic representation of findings in this area. The figure shows that young children (3–8-year-olds) evaluate themselves in very positive terms. Sometime around age 9 or 10, these evaluations become less positive. They are still favorable in an absolute sense (and compared to children's evaluations of others), but they are not as favorable as they were a few years ago. This downward trend continues into early adolescence, as children make

the transition from elementary school to junior high (or middle school), but begins to reverse itself around age 15. From that point on, self-evaluations become increasingly positive until they level off in early adulthood.

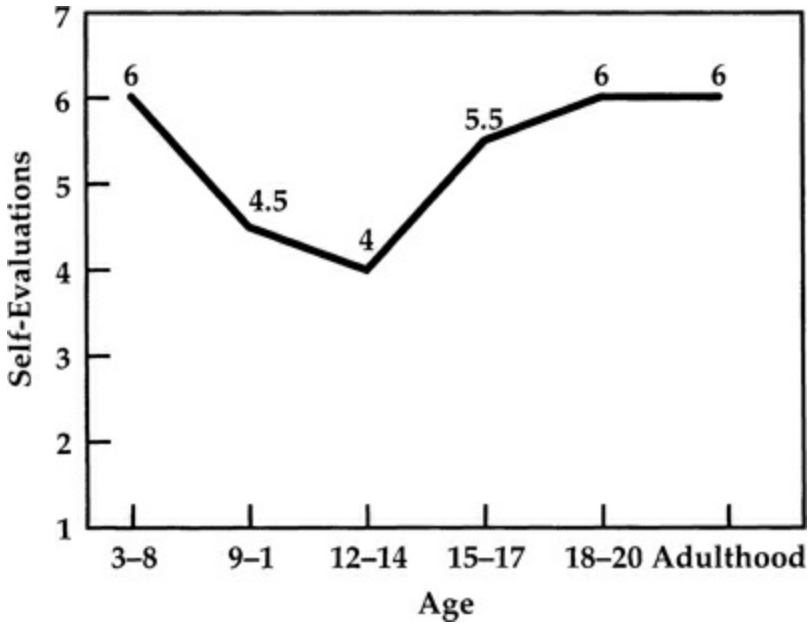

FIGURE 4.1. Schematic representation of the relation between self-evaluations and age. For this example, self-evaluations range from 1 to 7, with 7 being the most favorable. The data show that self-evaluations are very positive in childhood, become less positive during early adolescence, and rebound in late adolescence and early adulthood.

Adolescence

The fact that self-evaluations become more negative at the start of adolescence is consistent with the notion that adolescence is a difficult stage of life. These difficulties are thought to arise from the many changes adolescence brings. These include physical changes (brought about by the onset of puberty), cognitive changes (brought about by the emergence of formal operational thinking), and social changes (brought about by shifting societal expectations and changing friendship patterns).

The Adolescent Identity Crisis

Erik Erikson (1963, 1968) introduced the term “identity crisis” to describe the manner in which these changes can affect the way adolescents think and feel about themselves. He noted that many of the changes that accompany adolescence are abrupt and discontinuous, rather than smooth and gradual.

This disjunction can create confusion and instability in the self-concept. Adolescents can become "unsure of who they are." To resolve this crisis, adolescents must find a way to establish continuity between their prepubertal self and the way they look, think, and feel about themselves now. They must also integrate the various ideas they have about themselves (including those involving new social roles and obligations) into a unified self-concept. In other words, as they first did in infancy, adolescents must fashion a stable and integrated self-view.

> The young person, in order to experience wholeness, must feel a progressive continuity between that which he has come to be during the long years of childhood and that which he promises to become in the anticipated future; between that which he conceives himself to be and that which he perceives others to see in him and to expect of him. (Erikson, 1968, p. 87) The sense of [identity], then, is the accrued confidence that the inner sameness and continuity prepared in the past are matched by the sameness and continuity of [the present]. (Erikson, 1963, p. 261)

Erikson believed that these issues are resolved when adolescents make commitments in three broad areas: (1) occupation (i.e., choose a profession); (2) ideology (i.e., establish a religious preference, political affiliation, and general world view); and (3) sexual orientation (i.e., define their sexual orientation and adopt age-appropriate sex-role behavior).

Historically, these commitments were not difficult to make (Baumeister & Tice, 1986). Before the industrial revolution, adolescents worked on the family farm or served an apprenticeship that prepared them to assume the family business. They also tended to adopt their parents' religious and political beliefs, and very often allowed their parents to determine whom and when they married. This is much less true today. At least in contemporary Western societies, adolescents are free to choose their occupation, ideology, and marriage partners. This freedom has obvious advantages, but it is not without costs. Today, adolescents must decide who they are and what they will be, leading to the type of identity crisis Erikson depicted (Baumeister & Tice, 1986).

TABLE 4.3. Four Levels of Identity Commitment in College Students

Identity Level	Description
Identity achieved	Individual has resolved an identity crisis by making identity commitments
Moratorium	Individual is currently in the midst of an identity crisis and is actively working toward resolution

Identity diffused	Individual is mired in an identity crisis and is not making progress toward resolution
Foreclosure	Individual has made identity commitments in the absence of an identity crisis

Source: Adapted from Marcia, 1966, *journal of Personality anti Social Psychology*, 5, 551–558. Copyright 1966. Adapted by permission of The American Pyschological Association.

Having the freedom (and responsibility) to forge an identity suggests that adolescents will differ with respect to how far along they are in making their identity commitments. Marcia (1966) considered this issue and distinguished four levels of identity commitment in college students. As shown in Table 4.3, individuals who have successfully weathered an identity crisis and have made the occupational, ideological, and sexual commitments Erikson described are said to be in the *identity achieved* stage. In effect, these individuals have "found themselves" after a period of searching. Those who are actively working toward resolving their crisis but have yet to do so successfully are said to be in the *moratorium* stage. Individuals who are mired in an identity crisis and are not making any discernible progress toward resolving it are said to be in the *identity diffused* stage. Finally, individuals who have made commitments in the absence of any crisis are said to be in *the foreclosure* stage. Typically, these individuals have accepted the commitments of their parents without attempting to define these commitments for themselves. As one might expect, there is a developmental shift across the college years, with identity achievers being more common among college seniors than among college freshmen (Waterman, 1982).

Self-Awareness in Adolescence

In addition to being a time of identity confusion, adolescence is also a time of increased self-consciousness. This heightened self-awareness takes two forms. The first is a private preoccupation with oneself, epitomized by the soul-searching Erikson emphasized. The second is an excessive (some would say obsessive) concern with how one appears to others. Adolescents are renown for believing that others are scrutinizing them, talking about them, and evaluating them (Elkind, 1967). These feelings appear to be particularly acute during early adolescence (Rosenberg, 1979) and decline as adolescents begin to make their identity commitments (Adams, Abraham, & Markstrom, 1987; Ryan & Kuczkowski, 1994).

Sex Differences in Self-Evaluation during Adolescence

Another issue that has received attention is whether there are sex differences in the way adolescents think and feel about themselves. One widely cited study by Simmons and her associates found a sharp decline in the self-esteem of white females entering junior high school (Simmons, Blyth, Van Cleave, & Bush, 1979). Subsequent research has failed to replicate this finding (see, for example, Hirsch & Rapkin, 1987). Thus, although there is a general decline in self-related feelings at the start of adolescence (see Figure 4.1), this decline does *not* vary as a function of sex (or race).

There are, however, sex differences when it comes to the way adolescents evaluate their specific qualities (Marsh, 1989). For some attributes (e.g., perceived ability in math), boys evaluate themselves more positively than do girls; for other attributes (e.g., perceived verbal ability), girls evaluate themselves more positively than do boys. These differences generally follow cultural stereotypes and may be specific to Western societies.

Pubertal development also differentially affects the way boys and girls evaluate themselves. Among boys, early pubertal development is associated with a more positive view of one's body; among girls, early development is associated with a more negative view of one's body (for a review, see Buchanan, Eccles, & Becker, 1992). Again, these differences may well be specific to particular cultures, rather than universal.

Is Adolescence Invariably Stressful?

Adolescence is clearly a psychologically rich period of life. The dramatic physical, cognitive, and social changes that occur can have many negative consequences, as evidenced by the disproportionately high rates of unwanted teenage pregnancy, alcohol and drug abuse, accidents related to high-risk behavior, and suicide rates (Quadrel, Fischhoff, & Davis, 1993). Unfortunately, these problems seem only to be increasing as we enter the twenty-first century (Garland & Zigler, 1993).

But is adolescence invariably stressful? The answer appears to be "no." Although many adolescents confront the sorts of issues Erikson and others have spoken of, and may experience temporary *disturbances* in the self-concept, these changes are rarely extreme or long-lasting. Moreover, many

positive changes occur during adolescence as well, including strong ties to peer groups and a new sense of freedom and control. For these reasons, the majority of adolescents do not experience the kind of anguish and turmoil that the term "identity crisis" implies.

> The majority of adolescents of both genders successfully negotiate this developmental period without any major psychological or emotional disorder, develop a positive sense of personal identity, and manage to forge adaptive peer relationships at the same time they maintain close relationships with their families. (Petersen et al., 1993)

Self-Conceptions in Adulthood

And the years are rolling by me, they are rocking evenly,

I am older than I once was, and younger than III be, that's not unusual.

No it isn't strange, after changes upon changes we are more or less the same.

After changes we are more or less the same.

—P.SIMON, "The Boxer"

Although relatively serene in comparison to the many changes that characterize adolescence, adulthood is also marked by a number of important transitions. People get married, begin careers, have children, relocate to new cities, and so forth. Despite these many changes, the adult personality is remarkably stable (McCrae & Costa, 1994). Whether we look at mean levels (are the elderly more conscientious than the middle-aged?), or the rank-ordering of individuals (do people who score high on conscientious in middle age score high on conscientious later in life?), the story is the same: Personality changes little after the age of 30. This stability also characterizes people's ideas about themselves. Self-ratings obtained in early adulthood are highly similar to self-ratings obtained many years later (Mortimer, Finch, & Kumka, 1982). Identities are added and lost, of course, but our ideas about ourselves remain consistent.

Several theorists (e.g., Cohler, 1982; Filipp & Klauer, 1986; Gergen & Gergen, 1983) believe this stability arises from a constructive process in which individuals create stability by generating a coherent narrative of their life's story. This approach emphasizes that individuals are not passive witnesses to their life; they are active historians. They interpret their past in ways that allow them to maintain a strong sense of continuity (McAdams, 1996). Viewing experiences in this manner allows people to perceive the continuity that James (1890) noted was so critical to the preservation of

identity.

These interpretive processes extend into late adulthood. Although advancing age often brings many changes, including impairment in visual, auditory, and motor functioning, there is little consistent evidence that people's views of themselves change appreciably in their later years (Brandtstädter & Greve, 1994). Nor does research support the claim that elderly people are lonely, depressed, and filled with despair. Absent any serious health problems, people's feelings toward themselves and the perceived quality of their lives do not decline with age. Again, this is because people do not passively register the circumstances of their lives, they actively transform them. Among other things, they adjust their goals and adopt different targets for purposes of social comparison. Age also brings positive changes as well (Carstensen & Freund, 1994; Cross & Markus, 1991). As was true with adolescence, then, most people are not filled with angst at this stage of life.

> The processes of aging involve a multitude of changes and discontinuities that challenge the person's construction of self. … It seems plausible to assume, as many researchers in the field of adult development and aging have done, that such experiences should translate into problems of self-esteem, reduced well-being, and in increased vulnerability to depression. Despite their seeming theoretical consistency, these assumptions have received little empirical support. On the contrary, the picture that begins to emerge from recent research gives testimony to a remarkable stability, resilience, and resourcefulness of the aging self. (Brandtstädter & Greve, 1994, p. 71)

CHAPTER SUMMARY

In this chapter we have charted the developmental course of the self. We began by considering three theories that have guided research in this area. These were (1) Mead's (1934) theory of symbolic interactionism; (2) Piaget's (1952) theory of cognitive development; and (3) Erikson's (1963) eight-stage theory of psychosocial development.

We then examined the origins of self-awareness. Using self-recognition as an index of self-awareness, research has found (1) that self-awareness is not uniquely human, and (2) that self-awareness in humans emerges during the first year of life. Research using other means of assessing self-awareness (e.g., imitation) suggests that even newborns may possess a rudimentary self-schema.

Next, we discussed how people's thoughts about themselves change as they age. Self-descriptions show a shift toward increasing generality. Young children describe themselves in very concrete terms; during middle childhood, children's self-descriptions become more socially oriented; and adolescents focus more on their inner (psychological) qualities.

Finally, we examined self-development across the life span. We noted that the tendency for people to evaluate themselves in very positive terms declines a bit during early adolescence but then rebounds during early adulthood. We also noted that although adolescence is a time of great change in the self, most individuals weather these changes with a strong sense of identity. The same principle applies to the aging process. Most individuals retain a positive self-view as they age.

- Mead presented a theory of the self that tied its development to social interaction. Individuals enter the world as unsocialized beings, but they come to adopt the standards and norms of the culture into which they are born. They do so, Mead argued, by developing self—by acquiring the capacity to look back on themselves through the eyes of others. Two activities—the need to communicate with symbols, and play—facilitate the development of this perspective-taking ability. At first, these activities lead individuals to adopt the perspective of *particular* others toward the self; later, individuals come to adopt the perspective of an abstract, generalized other. When this perspective-taking sequence is completed, the self is said to be fully developed and the individual is said to be fully socialized.
- Piaget's model of development assumes that individuals progress through a series of cognitive stages. Each stage is characterized by qualitatively different modes of thinking. The stages move toward increasing sophistication in the use of abstract reasoning, perspective-taking capacity, and problem-solving ability. These stages affect self-understanding, as people's ideas about themselves grow increasingly complex as they age.
- Erikson outlined an eight-stage model of psychological development. Each stage is characterized by a particular psychological need or conflict that centers around a self-relevant issue. Failure to resolve these conflicts leads to later psychological difficulties.
- Research using a mirror-recognition task has found that two species besides humans (chimpanzees and orangutans) are capable of recognizing themselves in a mirror. Chimpanzees raised in social isolation fail to show mirror recognition, supporting Mead's claim that self-development requires social interaction.
- Self-recognition in infants begins with the ability to recognize oneself through contingent movement (as indexed by a mirror-recognition task). This ability is apparent around nine months of age. At around 15 months of age, infants are able to recognize themselves with noncontingent stimuli (e.g., a photograph) and pass the facial mark test. By 21 months of age, most infants are further able to identify themselves using personal pronouns.

- Self-awareness in humans may be present at birth. Infants appear to possess an innate *capacity* to distinguish self from "not self," to recognize their ability to produce desired outcomes, and to coordinate their own movements (suggesting the existence of a primitive body schema). These findings are consistent with the claim that newborns enter the world with a rudimentary sense of self that sets the stage for later development.
- People's thoughts about themselves follow a developmental sequence of increasing generality and abstraction. Young children focus on specific concrete, observable aspects of themselves, such as their physical characteristics and typical activities. As they age, children increasingly couch their self-descriptions in terms of more general traits and qualities that subsume these more specific attributes. They also begin to define themselves in social terms. Self-descriptions become increasingly more general and abstract during adolescence, with an emphasis on hidden, psychological characteristics (e.g., feelings, motives) rather than observable, physical ones.
- Self-evaluations also show a developmental pattern. Young children evaluate themselves very positively. This positivity declines a bit during early adolescence, as children make the transition from elementary school to middle school. Positive self-evaluations return as adolescents enter high school, and they remain generally positive throughout adulthood.
- Adolescence is a critical time in self-development. Erik Erikson coined the term "identity crisis" to describe the process many adolescents go through in their attempt to (re)define themselves. Not all adolescents suffer difficulties during this stage of life, however, and most weather the storms of adolescence unscathed.
- People's ideas about themselves remain rather stable during adulthood. New identities are added as people's lives change, but people actively interpret these experiences in ways that allow them to maintain a sense of continuity.

For Further Reading

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HARTER, S. (1983). Developmental perspectives on the self-system. In M. Hetherington (Ed.), *Handbook of child psychology: Social and personality development* (Vol. 4, pp. 275–385). New York: Wiley.

LEWIS, M., & BROOKS-GUNN, J. (1979). *Social cognition and the acquisition of self*. New York: Plenum Press.

[1]Cooley and Mead were colleagues at the University of Chicago and developed their theories at approximately the same time. However, Mead did not publish his ideas during his lifetime; his work was published posthumously by his students, assembled from their lecture notes. For this reason, Mead's work carries a later publication date than does Cooley's, even though the two worked concurrently.

[2]Although researchers generally accept that children pass through the stages Piaget described, there is disagreement about just when these stages occur. In general, it seems that Piaget was conservative in his estimates, and that many of the cognitive changes he described occur earlier (in some cases much earlier) than he believed (Mandler, 1990; Meltzoff, 1990). Because these issues are not yet resolved, the time frames I present should be regarded as approximate, not definitive.