# CHAPTER 8

Self and Other: Social-Cognitive Aspects of Personality

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We live in an information age, dominated by computers. Just a few years ago, computers were huge, scary-looking machines housed only in universities, military and government centers, and major research institutions. Today, many American families own more than one personal computer, and computers can be found in your car’s engine, your kitchen’s appliances, and your little sister’s toys. Psychologists use computers to collect and analyze data in their research. But one of the computer’s biggest impacts in psychology—and arguably in society as well—is the metaphor it gives us for human life. Not only do we all use computers, but we are all like computers in many ways. And we were like them even before they—the computers, that is—were invented.

Like computers, we take in, process, store, and retrieve information from the environment. Information comes to us through our sense organs, but like any good computer we do not simply receive that input in a passive manner. We work on it. We perform operations on the information, manipulating it and using it according to the complex software of the human mind. The ultimate output of this activity is human behavior. Human beings process information in order to act. Our perceptions, impressions, inferences, judgments, and memories eventually influence what we do.

Social-cognitive approaches to personality psychology begin with the assumption that human beings are complex information-processing systems that operate in social environments (Cervone et al., 2001; Kihlstrom & Hastie, 1997). Among the most important inputs in human life are our perceptions and impressions of ourselves, which shape and are shaped by our perceptions and impressions of others. Social-cognitive approaches to personality focus on how people make and use mental representations of themselves, of others, and of their social worlds and how those representations are implicated in social behavior. People formulate images, concepts, beliefs, values, plans, and expectations that govern what they do, and what they do comes to influence the nature of these mental representations. Put simply, cognition influences social behavior, and social behavior influences cognition.

People differ from one another with respect to the kinds of self-representations and social construals they characteristically formulate and act upon. Consequently, an essential domain of psychological individuality is the social-cognitive representations that people create. Like motives and goals (Chapter 7), social-cognitive adaptations in personality take us beyond broad dispositional traits to spell out the contextualized and contingent nature of human lives (Bandura, 1999; Cervone & Shoda, 1999a, 1999b; Mischel, 1999). If traits provide a rough sketch of psychological individuality, then the characteristic mental representations of self and social behavior that people construct—their characteristic self-conceptions, beliefs, values, and so on—help to fill in many of the details.

In this chapter, I examine characteristic adaptations in personality described in social-cognitive approaches to studying persons. I begin with George Kelly’s (1955) theory of personal constructs, which is arguably the first social-cognitive theory of personality ever developed. Although Kelly’s theory predates the computer age, his view of the person as an active interpreter of the social world presaged the many social-cognitive conceptions that have followed. I then consider cognitive styles in personality, which speak to individual differences in the ways people process information in the world. Finally, I describe a number of contemporary social-cognitive ideas in personality psychology, including social intelligence, self-schemas, self-guides, explanatory style, and (returning to a theme we explored in Chapter 2) mental representations of the people we love.

The Psychology of Personal Constructs

George A. Kelly (1905–1966) labored in relative obscurity as a school teacher, aeronautical engineer, and clinical psychologist until he wrote and published his two-volume The Psychology of Personal Constructs in 1955. The book took the field of personality psychology by storm. It presented a boldly original theory of the person that seemed to bear little if any resemblance to the classic personality theories of the day, such as those proposed by Freud, Jung, Rogers, Maslow, Murray,
Allport, Eysenck, Cattel, and the behaviorists. The unusual terms Kelly proposed became part of the standard lexicon of personality psychology—terms such as personal construct, range of convenience, fixed-role therapy, and Rep Test. Indeed, Kelly became something of an overnight celebrity in the field of personality psychology. Unfortunately, however, his one major book is the only comprehensive statement of the theory ever produced. An early death prevented his developing and refining the theory further. Nonetheless, what Kelly left us with was a provocative view of human nature and a set of stimulating ideas about psychological individuality, grounded in the image of the person as an inquisitive scientist seeking to predict, control, and explain the social world.

GEORGE KELLY’S THEORY

As we saw in Chapter 7, many personality theories have traditionally assigned a central role to human motivation. Why do people do what they do? What gets behavior going? What internal motives, needs, drives, desires, and so on energize and select human action? In a striking departure from common practice in personality psychology, Kelly (1955) asserted that the “problem” of human motivation is not a problem at all. The search for underlying principles to explain why people do what they do is futile, he asserted. We need not posit behavior approach and inhibition systems (Chapter 5), sexual and aggressive instincts (Freud), principles of reinforcement (behaviorists), needs and motives (Murray, McClelland), or goals, strivings, or the urge toward self-actualization (Rogers, Maslow) to explain what motivates people to act. People are alive. They act by virtue of being alive. It’s really quite simple.

Well, not that simple. Kelly’s radical dismissal of the concept of motivation is really only partial, for his theory implies a fundamental principle of motivation itself (Hogan, 1976; Shotter, 1970): A person is motivated to predict or anticipate what will happen to him or her. What moves people to act is their desire to know what the world has in store for them. Fundamentally, the person is like a scientist, seeking to predict and control events:

Mankind, whose progress in search of prediction and control of surrounding events stands out so clearly in light of the centuries, comprises the men we see around us every day. The aspirations of the scientist are essentially the aspirations of all men. (Kelly, 1955, p. 43)

Table 8.1 summarizes the main points of Kelly’s theory in terms of the postulates and corollaries he presented in *The Psychology of Personal Constructs*. Kelly’s model for human life is a common-sense brand of science. As we saw in Chapter 1, the first step of scientific inquiry is the classification of experience. Science begins when the observer seeks to make initial sense of the world by imposing some kind of organization upon it. What William James called the “blooming, buzzing confusion” of subjective human experience must be ordered, classified, and divided into categories if the scientist is to know anything at all. From these initial classifications are built synthesizing theories, from which are subsequently deduced discrete hypotheses to be tested through experimentation and other systematic procedures.

According to Kelly, each of us classifies his or her world by developing personal constructs, which are characteristic ways of construing how some things are alike and some things are different from one another. Every construct is bipolar (the “dichotomy corollary” in Table 8.1), specifying how two things are similar to each other (lying on the same pole) and different from a third thing (lying at the opposite pole). For example, I may routinely classify my friends in terms of the personal construct “serious/funny.” Grant and Jack are relatively serious; Dean differs from them both in that he is relatively funny. All three friends are, in fact, similar to and different from one another in a great many ways. Despite the blooming, buzzing complexity of my experiences with these friends, I nevertheless anticipate my interactions with them,
TABLE 8.1 KELLY’S FUNDAMENTAL POSTULATE AND ELEVEN COROLLARIES

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<tr>
<th>Postulate/Corollary</th>
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<tr>
<td><strong>Fundamental Postulate:</strong> A person’s processes are psychologically channelized by the ways in which he or she anticipates events.</td>
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<td><strong>Construction Corollary:</strong> A person anticipates events by construing their replications.</td>
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<td><strong>Individuality Corollary:</strong> Persons differ from one another in their construction of events.</td>
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<td><strong>Organization Corollary:</strong> Each person characteristically evolves, for his or her convenience in anticipating events, a construction system embracing ordinal relationships between constructs.</td>
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<td><strong>Dichotomy Corollary:</strong> A person’s construction system is composed of a finite number of dichotomous constructs.</td>
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<td><strong>Choice Corollary:</strong> A person chooses for him- or herself that alternative in a dichotomized construct through which he or she anticipates the greater possibility for extension and definition of his or her system.</td>
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<tr>
<td><strong>Range Corollary:</strong> A construct is convenient for the anticipation of a finite range of events only.</td>
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<td><strong>Experience Corollary:</strong> A person’s construction system varies as he or she succeeds in construing the replications of events.</td>
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<tr>
<td><strong>Modulation Corollary:</strong> The variation in a person’s construction system is limited by the permeability of the constructs within whose range of convenience the variants lie.</td>
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<td><strong>Fragmentation Corollary:</strong> A person may successively employ a variety of construction subsystems that are inferentially incompatible with each other.</td>
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<td><strong>Communality Corollary:</strong> To the extent that one person employs a construction of experience that is similar to that employed by another, his or her psychological processes are similar to those of the other person.</td>
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<td><strong>Sociality Corollary:</strong> To the extent that one person construes the construction process of another, he or she plays a role in a social process involving the other person.</td>
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**SOURCE:** Modified from The Psychology of Personal Constructs, by G. Kelly, 1955, New York: W.W. Norton.

in part, by virtue of the construct “serious/funny.” The construct helps me predict and control my interpersonal world. I know from past experiences with these friends (the “experience corollary”) that when I am with Jack or Grant we will usually talk seriously about professional issues or current events; getting Dean to talk seriously about anything at all, on the other hand, requires a lot of extra effort.

People are best understood in terms of their own construct systems. Each person develops his or her own construct system that contains a number of constructs organized into a hierarchy (“organization corollary”). This means that within any construct system certain constructs are *superordinal* (encompassing many other constructs) and others are *subordinal* (being encompassed by larger constructs). Thus, the subordinal construct of “helpful/unhelpful” may be encompassed by the more general superordinal construct of “friendly/unfriendly.” Every person’s construct system is unique (“individuality corollary”), which means that everybody divides up subjective experience in a slightly different way. To know another person’s construct system is to see the world through his or her eyes (“sociality corollary”).

Within a given person’s construct system, particular constructs differ from one another with respect to their *range of convenience* (“range corollary”). Thus, the construct “friendly/unfriendly” may have a wide range of convenience: It is likely to guide the person’s anticipations of events in a large number of situations. By contrast, the construct “liberal/conservative” is likely to have a narrower range of convenience for most people. For most people, “friendly/unfriendly” is a more salient and determining dimension in their interactions with other people than is “liberal/conservative.” Of course, there are marked individual differences across persons with respect to range. For instance, a politically astute woman who is especially sensitive to political issues may utilize the construct “liberal/conservative” in a wide range of situations. She may be tuned in to information in her environment suggestive of political meaning. Therefore, one of the first dimensions upon which she
judges people may be their perceived political persuasion. At a cocktail party, she is introduced to a middle-aged man who looks like a banker, dressed in a three-piece suit. His hair is impeccably groomed; his wristwatch, expensive. She immediately says to herself, “I think this guy is a political conservative; I bet he usually votes Republican.” Of course, she may be wrong. She may learn that he is an activist lawyer for the American Civil Liberties Union and that he always votes for liberal candidates. The woman need not be wedded to her initial hunch; constructs are more like hypotheses to be tested than like assumed facts. But the hunch provides her with an important starting point in her interaction, a way of anticipating what may or may not happen next. Anticipations guide behavior and experience. In the words of Kelly’s “fundamental postulate,” “a person’s processes are psychologically channelized by the ways in which he [or she] anticipates events” (Kelly, 1955, p. 46).

Constructs differ in other ways, too. Some constructs are highly permeable whereas others are not (“modulation corollary”). A permeable construct is open to modification and the introduction of new elements. A person with an especially permeable construct system is likely to be seen by others as very open-minded. By contrast, a person who is unable to modify his or her constructs in light of new information and expanding experiences is likely to be viewed by others as relatively rigid and inflexible. Complete permeability, however, is not altogether good. If a construct is so permeable that it changes with virtually every relevant happening, it does not function well as an aid in anticipating events. Another problem can arise when different constructs within a person contradict each other. When a person’s constructs are mutually incompatible and contradictory (“fragmented”), then he or she is likely to have a difficult time making consistent sense of the world and anticipating events in an adaptive way (“fragmentation corollary”).

Kelly’s personal-construct theory provides an interesting perspective from which to view a number of traditional concepts in personality psychology. Take, for instance, the concept of “the unconscious.” Kelly sees no need to posit a mysterious unconscious domain to which have been consigned repressed wishes and conflicts. In Kelly’s cognitive view, “the unconscious” is merely those constructs that are nonverbal, submerged, or suspended. For certain constructs, we are unable to assign a verbal name; thus, we may not be aware of them. Other constructs are submerged beneath other constructs or suspended from the construct system because they do not seem to fit. A highly fragmented construct system, therefore, is likely to contain submerged or suspended constructs of which the person is not aware. Yet these unconscious constructs continue to “channelize” behavior and experience.

Kelly views “anxiety” as “the recognition that the events with which one is confronted lie outside the range of convenience of one’s construct system” (1955, p. 482). In other words, when we confront inexplicable events in the world for which our construct system does not seem to be prepared, we experience anxiety. Ultimately, then, anxiety is a fear of the unknown—the fear that the blooming, buzzing confusion cannot be understood. “Guilt” is a “perception of one’s apparent dislodgment from his core role structure” (p. 502). “Core role structure” is the construction a person has of who he or she is in relation to significant people, such as parents. It is embedded within the person’s general construct system. In essence, then, guilt follows the perception that one is no longer living according to an especially valued aspect of one’s personal-construct system.

EXPLORING PERSONAL CONSTRUCTS: THE REP TEST

Despite the formal postulates and corollaries, Kelly’s theory of personal constructs has an appealing common-sense quality that fits well with most people’s daily experience. One of the best ways to get a feel for Kelly’s approach is to participate in the Role Construct Repertory Test (Rep Test), a personality assessment procedure designed by Kelly to explore personal constructs in people’s lives. The Rep Test is a very flexible procedure that can be used in clinical work and in research. It is also easy to administer to yourself.
One version of the Rep Test asks you to make a series of comparisons among those people who play important roles in your life. Kelly defined a role as an understanding or expectation of what particular people in a person's life do. The role of "mother," therefore, consists of a person's understanding of how mothers behave in various situations. The first step in the Rep Test is to compile a Role Title List. Let us consider 15 different roles in your life. For each of the 15 roles listed in Table 8.2, write the name of the person who fits the description presented. Do not repeat names. If any role title appears to call for a duplicate name, substitute the name of another person whom the second role suggests to you.

When you have listed 15 people who play important roles in your life, compare and contrast them in a way to discern some of the important personal constructs you employ to make sense of your interactions with these people. Table 8.3 lists 15 sets of numbers. Each set contains three numbers, referring to the role titles you have listed above. Thus, the number "14" refers to "the most successful person whom you know personally." For each set of three numbers, think of how the people corresponding to the first two numbers are similar to each other and at the same time different from the person corresponding to the third number. Write a word or phrase in the blank under "Similar" to denote how the two are similar and then a contrasting word under "Contrast." For example, the first set presents the numbers "9, 11, 14" (corresponding to "Boss," "Sought Person," and "Successful Person," respectively). Imagine that the Boss you have in mind is similar to your Sought Person in that they are both "easy-going" and that they both differ from the Successful Person who seems, by contrast, "hard-driving." You would write "easygoing" in the "Similar" blank and "hard-driving" under "Contrast."

Each of the 15 pairings of "Similar" and "Contrast" represents a single construct. At this point, the analysis of your responses can take many different paths. You may wish to look carefully at the ways in which you characterize certain critical contrasts in your life, such as those between Ex-Flame and current Boy (Girl) Friend. Or you may wish to look at the overall pattern of constructs you have

**TABLE 8.2 ROLE TITLE LIST**

1. Your mother or the person who has played the part of mother in your life
2. Your father or the person who has played the part of father in your life
3. Your brother nearest your age; if you have no brother, the person who is most like one
4. Your sister nearest your age; if you have no sister, the person who is most like one
5. A teacher you liked or the teacher of a subject you liked
6. A teacher you disliked or the teacher of a subject you disliked
7. Your closest girl (boy) friend immediately before you started going with your wife (husband) or present closest girl (boy) friend (Ex-Flame)
8. Your wife (husband) or closest present girl (boy) friend
9. An employer, supervisor, or officer under whom you served during a period of great stress (Boss)
10. A person with whom you have been closely associated who, for some unexplainable reason, appears to dislike you (Rejecting Person)
11. The person whom you have met within the past 6 months whom you would most like to know better (Sought Person)
12. The person whom you would most like to be of help to, or the one whom you feel most sorry for (Pitied Person)
13. The most intelligent person whom you know personally
14. The most successful person whom you know personally
15. The most interesting person whom you know personally
TABLE 8.3 PERSONAL CONSTRUCTS, REPRESENTED BY “SIMILAR” AND “CONTRASt” PARINGS

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<th>Similar</th>
<th>Contrast</th>
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<td>2</td>
<td>10, 12, 13</td>
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<td>2, 5, 12</td>
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<tr>
<td>15</td>
<td>11, 13, 14</td>
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delineated. How do the various constructs relate to one another? Are some constructs subordinal or superordinal to other constructs? Do you use many different constructs? Do you tend to use certain constructs again and again? If you tend to view many of the similar-contrast characterizations in terms of, say, the construct “honest/dishonest,” or some variation on this idea, then you may conclude that this is an especially robust and meaningful construct in your life.

Procedures have been developed for quantifying results from the Rep Test for personality research. One line of research examined individual differences in cognitive complexity as revealed by the Rep Test (Crockett, 1965). People who use many different kinds of constructs are said to manifest higher levels of cognitive complexity. They tend to view the world in a highly differentiated manner. People who use few different kinds of constructs are viewed as having a simpler, more global construct system.

Another line of research examined construct similarity among friends and acquaintances (Duck, 1973, 1979). Researchers have administered various forms of the Rep Test to college students and then examined their patterns of peer interaction and friendship formation. In general, those students who have similar construct systems tend to become close friends and to remain friends for longer periods of time. For example, Duck and Spencer (1972) obtained personal-construct measures for female college freshmen at the beginning of the school year. The women in the study had all been assigned to the same residence hall. Though they were unacquainted at the beginning of the study, those women who shared similar constructs were most likely to become friends over the course of the school year. In another study, similarity of constructs was a more significant predictor of friendship formation than was similarity on self-report measures of traits (Duck & Craig, 1978). In other words, friends may be drawn together not so much by a perception that they behave in the same kinds of ways (that they are both extraverted or achievement-oriented, for instance) but rather by the perception that they see the world in the same way. People look to match their subjective experience with that of others. People look for affirmation of their own conscious meanings in the
meanings of others. In relating to important others in your life, sharing meanings may be more important than doing the same thing.

Historians of psychology now agree that George Kelly was way ahead of his time (Walker & Winter, 2007). In the 1950s, he anticipated psychology’s subsequent move away from strictly behaviorist accounts of human action to perspectives emphasizing cognition, conscious experience, and personal meaning (Neimeyer, 2001). Over the past 50 years, personal construct theory has been elaborated in important ways within the fields of clinical and environmental psychology, anthropology, and criminology (Walker & Winter, 2007). An especially influential line of work has examined the ways in which mental illness impacts the construction of self and others—the kinds of construct systems, for example, articulated by people suffering from schizophrenia or posttraumatic stress disorder (e.g., Bannister, 1962; Winter, 1992). For personality psychology, Kelly presented an innovative and refreshingly sensible perspective for understanding the whole person. By imagining people as everyday scientists and focusing on how we seek to categorize, predict, and control our social worlds, Kelly signaled the importance of social-cognitive adaptations in human personality and the role of mental representations of self and others in everyday behavior.

**Cognitive Styles and Personality**

Kelly viewed the person to be like a scientist, continually categorizing experience and testing out hypotheses as he or she anticipates and reacts to events in the world. In more contemporary terms, people are constantly processing information about the world in order to anticipate and adapt to the challenges of social life. Kelly’s individuality corollary stressed that people differ from one another in the manner in which they construe events. Indeed, individual differences in styles of processing information have been recognized for centuries. The recognition that people think differently from one another goes back to the myths of antiquity—for example, Homer’s epic tales show how the subtle and occasionally convoluted thought patterns of Odysseus contrast markedly with the straightforward, simple cognitions of Achilles. Cognitive styles are people’s “characteristic and typically preferred modes of processing information” (Sternberg & Grigorenko, 1997, p. 700).

In principle, cognitive styles are not the same thing as cognitive abilities, like verbal, numeric, and spatial abilities measured on intelligence tests. While cognitive abilities assess how well a person performs on cognitive tasks, cognitive styles tap instead into a person’s characteristic way or manner of processing information. As such, cognitive styles exist on the borderline between what has traditionally been associated with personality and what has traditionally been associated with intelligence and cognition.

Psychologists have studied many different kinds of cognitive styles, and they have studied them for many different reasons. In recent years, educational psychologists have been especially interested in identifying different styles of learning among students in order to improve teaching in the schools (Sternberg & Grigorenko, 1997). Cognitive style is partly captured in the Big Five trait taxonomy, via the trait cluster of Openness to Experience (O; Chapter 5, this volume). People high in O tend to process information in a more nuanced, differentiated, and abstract manner, research suggests, while those low in O see fewer distinctions and adhere to concrete and clearly defined categories. Indeed, many personality constructs relate to information processing in one way or another, and psychologists have been very interested in studying the relations between individual differences in, for example, traits and motives on the one hand and ways of perceiving and thinking on the other. Still, certain concepts in personality science stand out for their explicit focus on characteristic styles of information processing and for the systematic research that psychologists have conducted on them. In what follows, I consider two dimensions of cognitive style that have received a great deal of attention from personality psychologists. They are (1) field independence–dependence and (2) integrative complexity.
FIELD INDEPENDENCE–DEPENDENCE

In the 1940s, Solomon Asch and Herman A. Witkin began studying how people decide whether an object is perpendicular to the ground or tilted to some degree. They asked people sitting in tilted chairs placed in custom-built tilted rooms to adjust their chairs until they felt that they were in an upright position—objectively perpendicular to the ground (Witkin, 1950). The task is tricky because the tilted room provides visual information that conflicts with the body’s inner cues concerning what is upright. Some people tilt their chairs to become perpendicular to the (tilted) room; others ignore the tilt of the room and adjust their chairs according to inner cues. The people who use the room as the reference for their adjustment exhibit a field-dependent style for solving the problem. Their perception and judgment of perpendicularity depend on the “field,” or environment. The people who bypass the field and make their perception and judgment according to inner cues show a field-independent style.

For more than 50 years Witkin and his colleagues have come to understand field independence–dependence as a broad and pervasive cognitive style that underlies many important personality differences (Bertini, Pizzamiglio, & Wagner, 1986; Goodenough, 1978; Lewis, 1985; Witkin, Goodenough, & Oltmann, 1979). The dimension has two poles. At one extreme, highly field-independent people process information in an especially analytical and differentiated style. They rely on internal frames of reference that enable them to act upon information in a highly autonomous fashion. At the other extreme, highly field-dependent people employ external frames of reference available in the field. They tend to base their perceptions on the external context within which they occur. Each pole has certain benefits and liabilities, depending on specific conditions. Therefore, neither end of the continuum is “better” than the other. Most people fall somewhere in the middle of the field independence–dependence continuum.

Field-independent people are adept at pulling information out of an embedding context. A good example of this is identifying camouflaged figures, as assessed on the Embedded Figures Test (Witkin, 1950). In Figure 8.1, the problem is to locate a square, such as the one shown in A, that is hidden in the picture of the coffeepot shown in B. (The solution is shaded in C.) As you may discover for yourself, the several parts of the square in B are difficult to imagine as belonging to the

![Figure 8.1 AN EMBEDDED SQUARE](image)

Find the square shown in A camouflaged in the coffeepot shown in B. (The solution is shaded in C.)


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same (square) figure. Instead, the right half of the square is immediately seen as part of the coffeepot while the left is seen as part of the background. To find the camouflaged square, it is necessary to restructure the perceptual field. People who are field-independent restructure the perceptual field so that they perform quite well in camouflage tasks.

Table 8.4 lists a number of correlates of field independence and field dependence. In general, field independence is associated with greater levels of perceptual and cognitive restructuring. Field-independent people tend to reshape information from the environment according to internalized plans, rules, and goals to a greater extent than do people who are field dependent. They tend to view information in the nonsocial world in a highly differentiated manner. In one study, 32 field-dependent and 32 field-independent college women solved a series of anagrams (scrambled words) under various conditions (Frank & Noble, 1985). The results showed that field-independent students solved the anagrams more quickly and found the task easier than did field-dependent students. The field-independent students found it easier to provide a disorganized field with organization. Field-independence predicts the ability to block out irrelevant information and focus attention on central tasks and stimuli in complex learning situations (Messick, 1994; Richardson & Turner, 2000). For example, field-independent eighth-graders learn more effectively than their field-dependent peers in complex computer environments that provide hypermedia-based instruction (Weller, Repman, Lam, & Hoore, 1995). Field-independent police officers make more accurate judgments under high-stimulation crime conditions, compared to field-dependent officers. In simulated crime scenarios, the field-independent officers were better able to ignore distracting sights and sounds and were more accurate in deciding when to shoot their guns (Vrij, van der Steen, & Koppelaar, 1995).

Field dependence may be adaptive in predominantly agrarian societies, such as in rural China, wherein people need to pay careful attention to the concrete particulars of their physical and social environments. (SOURCE: Corbis Digital Stock)

Like Kelly’s model of the scientist, the field-independent person approaches the world as a hypothesis-tester, systematically differentiating causes and effects and analyzing the world in terms of its separate parts. Not surprisingly, people who are field-independent are drawn to careers that require cognitive restructuring and objective analysis of information, such as careers in science, mathematics, management, and mechanics. By contrast, field-dependent people are more global and intuitive in processing information about the world. They tend to engage in less cognitive restructuring, accepting information from the environment in its own contextual terms, rather than employing internal plans and guidelines for information processing. Interestingly, field-dependent people tend to be more interested in humanitarian and social-welfare professions, such as careers in the ministry, social work, teaching young children, the social sciences, and selling and advertising (Goodenough, 1978).

Cognitive style appears to have significant influences on interpersonal functioning. Numerous studies suggest that the field-dependent person is more sensitive to social context than the field-independent person. Field-dependent people pay closer attention to interpersonal cues and social information. They tend to spend more time looking at people than at inanimate objects and to make more sustained eye contact when talking with others. Field-dependent people prefer being physically closer to others than do field-independent persons. In one study, for example, participants were required to give prepared talks on several topics to the experimenter, and the physical distance between the speaker and the experimenter was measured during the presentations (Justice, 1969). Field-dependent speakers chose to stand closer to their listeners than did field-independent speakers. In another study of interpersonal distance, field-dependent people showed more speech disturbances when seated 5 feet away from their conversational
partners than when seated only 2 feet away. In contrast, the interpersonal distance had less of an effect on field-independent speakers (Greene, 1973).

In general, women score toward the field-dependent end of the continuum, whereas men score toward the field-independent end. This gender difference is not huge, but it is relatively consistent across studies. From childhood to adulthood, people develop in the direction of field independence. Thus, children are generally more field dependent than adults. Nonetheless, individual differences in elementary school are predictive of adult differences. Thus, a boy who is relatively field independent compared with his male peers at age 10 is likely to remain somewhat more field independent than his peers 20 years later. Certain socialization practices have been associated with differences in cognitive style. In general, evidence supports the common sense conclusion that development proceeds toward greater field independence when socialization encourages separation from parental control. A more tightly organized and controlling milieu, on the other hand, is likely to encourage field dependence. In general, field-independent people report that their parents were relatively permissive, whereas field-dependent persons often report an emphasis on parental authority in their families.

**TABLE 8.4 SELECTED RESEARCH FINDINGS ON FIELD INDEPENDENCE–DEPENDENCE**

<table>
<thead>
<tr>
<th>Correlates of Field Independence</th>
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<tbody>
<tr>
<td>Greater accuracy in estimating what confused or distorted images “should” look like</td>
</tr>
<tr>
<td>Better problem solving in tasks requiring unconventional use of common objects and tools</td>
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<tr>
<td>Hypothesis-testing approach to complex problems</td>
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<tr>
<td>Experiences of guilt rather than shame</td>
</tr>
<tr>
<td>Tendency to describe other people in negative terms</td>
</tr>
<tr>
<td>Preference for solitary games in childhood</td>
</tr>
<tr>
<td>Careers in mathematics and science, such as physics, architecture, and engineering, in health professions such as medicine and dentistry, and in certain practical occupations such as carpentry, farming, and mechanics</td>
</tr>
<tr>
<td>Socialization patterns emphasizing independence and autonomy</td>
</tr>
<tr>
<td>Predominant in hunting societies</td>
</tr>
<tr>
<td>Unrelated to overall academic achievement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Correlates of Field Dependence</th>
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<tbody>
<tr>
<td>Tendency to rely on other people for guidance</td>
</tr>
<tr>
<td>Greater sensitivity to nuances of interpersonal relationships</td>
</tr>
<tr>
<td>Higher levels of eye contact</td>
</tr>
<tr>
<td>Better memory for names and faces</td>
</tr>
<tr>
<td>Knowing more people and being known by more people</td>
</tr>
<tr>
<td>Greater levels of self-disclosure with other people</td>
</tr>
<tr>
<td>Experiences of shame rather than guilt</td>
</tr>
<tr>
<td>Tendency to describe other people in relatively positive terms</td>
</tr>
<tr>
<td>Preference for social play in childhood</td>
</tr>
<tr>
<td>Careers in helping humanitarian occupations such as social worker, minister, and rehabilitation counselor, in certain teaching areas such as elementary school and social sciences, and in certain business occupations such as selling, advertising, and personnel</td>
</tr>
<tr>
<td>Socialization patterns emphasizing conformity and dependence on authority</td>
</tr>
<tr>
<td>Predominant in agricultural societies</td>
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Some of the most interesting findings on field independence–dependence come from cross-cultural studies. Witkin and Berry (1975) provide evidence that migratory hunting-and-gathering tribes tend to be field independent, whereas societies organized around subsistence-level agriculture tend to be more field dependent. Hunting-and-gathering societies are constantly on the move from one geographical setting to the next. Field-independence would appear to be an adaptive cognitive style for this migratory and predatory lifestyle. Witkin and Berry (1975) write:

The ecological demands placed upon persons pursuing a hunting and gathering subsistence economic life style require the ability to extract key information from the surrounding context for the location of game and the ability to integrate these bits of information into a continuously fluctuating awareness of the hunter’s location in space for the eventual safe return home. (p. 16)

On the other hand, agrarian societies are much more sedentary. Because agrarian societies stay put for long periods of time, their members build up elaborate systems of social interaction. Adherence to group norms may become more valuable to group survival than autonomous individual functioning.

INTEGRATIVE COMPLEXITY

Whereas individual differences in field independence–dependence refer to styles of perceiving the world, certain other cognitive styles studied by personality psychologists focus on differences in reasoning about or interpreting the world. Integrative complexity is the extent to which a person reasons about issues in a differentiated and integrative manner (Suedfeld, Tetlock, & Streufert, 1992). People high in integrative complexity make many conceptual distinctions and see many interconnections when interpreting and making sense of intellectual and social issues. People low in integrative complexity, by contrast, see fewer distinctions and tend to reason about the world in a holistic manner.

Individual differences in integrative complexity are assessed through content analysis of written material (Baker-Brown et al., 1992). For example, a person’s account of a particular experience, a speech or diary entry, an essay, an argument, or a letter written to a friend can all be scored for integrative complexity. The researcher rates particular passages in the text with respect to the degree of differentiation and integration shown. Passages that rely on simplistic explanations and isolated single judgments receive relatively low scores. Those that bring in many different perspectives and that balance different explanations and considerations receive relatively high scores for integrative complexity. While people differ with respect to their characteristic levels of integrative complexity, each person may also exhibit many different levels, depending on the situation. For example, when a college student writes a love letter to her boyfriend, she may show a rather low level of integrative complexity. But in composing a history essay to explain economic changes in Europe during the 1800s, her expressed integrative complexity may be higher.

Some of the most creative research on integrative complexity has been conducted by Philip Tetlock on political reasoning and by Peter Suedfeld on literary correspondence. In one especially provocative study, Tetlock (1981b) analyzed selected speeches of 20th-century American presidents before and after their elections to office. He found that integrative complexity was generally low while the man was campaigning for the presidency but rose markedly after he was elected. Tetlock interpreted the finding to mean that presidential candidates tend to present issues in simplistic black-and-white terms in order to get elected but, once elected, adopt more complex reasoning patterns. Interestingly, when incumbent presidents begin campaigning for a second term, the integrative complexity levels of their rhetoric drop again, as they again seek to sway the voters by simplifying the issues.

Coding Supreme Court decisions (Tetlock, Beranzewig, & Gallant, 1985) and the political rhetoric of American senators (Tetlock, 1984; Tetlock, Hannum, & Micheletti, 1984) and of members of the British House of Commons (Tetlock, 1984), Tetlock has made a compelling case...
for a connection between political ideology and integrative complexity. Politicians with relatively liberal voting records (for the most part, liberal Democrats in the United States Senate and moderate socialists in the British House of Commons) tend to exhibit higher levels of integrative complexity in their speeches than do those with relatively conservative voting records. Also low in integrative complexity are politicians with extremely liberal (such as extreme socialists in the British House of Commons) or extremely conservative views. The data for the British House of Commons are displayed in Figure 8.2.

Tetlock explains his findings in terms of value plurality. He argues that freedom and equality are the two fundamental values upon which Western political rhetoric is often evaluated. Conservatives tend to value freedom over equality. Extreme liberals (socialists, communists) value equality over freedom. Moderate liberals, however, value both. Therefore, a moderate liberal is likely to fashion a more complex political ideology in order to accommodate his or her allegiance to both freedom and equality—two values that often conflict. While a traditionally conservative politician in Great Britain or the United States is likely to oppose increases in taxes for welfare spending because of the belief that citizens should be free to spend their hard-earned money on what they want, the liberal may find the issue more difficult in that he or she places a premium on equality as well as freedom. According to the value of equality, tax dollars should support those who are less well-off. Yet, freedom dictates low taxes and laissez faire capitalism. As a result, the liberal is likely to bring in more considerations and find more shades of gray in political rhetoric about such issues as taxation and social programs. In Tetlock’s view, the liberal is more complex and conflicted. From the standpoint

In the British House of Commons, politicians with moderate to moderately liberal affiliations tend to show the highest levels of integrative complexity as determined from political speeches.

of the conservative, on the other hand, the liberal may seem “wishy-washy” or “afraid to take a stand.”

A very different approach to integrative complexity is apparent in the research of Suedfeld on the relation between social events and literary correspondence (Porter & Suedfeld, 1981; Suedfeld, 1985). Porter and Suedfeld (1981) analyzed the personal correspondence of five eminent British novelists of the 19th and 20th centuries: Charles Dickens, George Eliot, George Meredith, Arnold Bennett, and Virginia Woolf. Each novelist’s life was divided into 5-year periods and the investigators randomly sampled between 10 and 20 paragraphs from the novelist’s personal correspondence for each period. Each paragraph was scored on a 7-point scale, ranging from very low to very high integrative complexity. Table 8.5 provides an example of a verbatim paragraph scoring relatively low and another scoring relatively high in integrative complexity.

Porter and Suedfeld (1981) correlated integrative complexity scores with various historical events and personal changes in the novelists’ lives. They found that integrative complexity scores decreased during times of war but increased during periods of civil unrest. War appeared to exert a simplifying effect on literary correspondence. During periods in which their countries were involved in international combat, the novelists tended to present issues in relatively undifferentiated terms, failing to take into consideration multiple and complex points of view. Porter and Suedfeld speculate that war has the general effect of restricting the “information flow” in the environment. By contrast, civil unrest (such as major political changes) appeared to evoke a more flexible and integrative outlook, perhaps by stimulating new ideas and possibilities in the environment’s information flow.

Table 8.5 Verbatim Passages from the Correspondence of Eminent Novelists Scored for Integrative Complexity

<table>
<thead>
<tr>
<th>Low on integrative complexity (score = 2)</th>
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<tr>
<td>Tonight I finished First Principles. I suppose that I can never have again the same thrill of admiration as this book has given me. If any book could be called the greatest book in the world, I suppose this can. I have never read anything a tenth part so comprehensive. And it makes its effects by sheer honest argumentative force. There are no ornaments of brilliance, wit, ingenuity, or even eloquence. Yet the closing pages of Part I, and the closing pages of Part II, are equally overwhelming in their effect. Faultless, of course, are in it but it is surely the greatest achievement of any human mind. This I do think. And Spencer has not yet come into his own in England. As a philosopher, in the real sense—not as a discoverer, or a man of science—but as a philosopher, he is supreme in the history of intelligence. I say this, not because I have read all the other great ones, but because I cannot imagine the possibility of anyone having produced anything else as great as First Principles. [Note that in this passage the author elaborates on an absolute rule or declaration. There is little by way of alternative perspectives discussed.]</td>
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<table>
<thead>
<tr>
<th>High on integrative complexity (score = 6)</th>
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<tbody>
<tr>
<td>The professor says you do not consort with Germans at all. I am grieved at this. I am sure you do not altogether underrate the fine qualities of German youth, but perhaps your immediate sympathies, and a somewhat exaggerated sensitiveness, stand in your way. It will be a pity, if this is so, and for more reasons than one. If you do not cultivate the people you are living amongst in your youth, you will fail in having pleasant places to look back at—landmarks of your young days. And besides, the Germans are your hosts, and you owe them at least a guest’s thankfulness. I esteem them deeply for their fine moral qualities. Just now they are abusing us roundly, but that will pass away. I know they have the capacity for friendship, and that as a rule English friendships are not so lasting. Look around you, and try to be accessible to your German associates. Consider whether you are not yielding to luxurious pre-dispositions in your marked preference for English ones. You will see enough of the latter when you return home. [This passage shows simultaneous operation of alternatives and consideration of the functional relations between them.]</td>
</tr>
</tbody>
</table>

With respect to personal changes, Porter and Suedfeld (1981) found that integrative complexity decreased during times of illness, was unrelated to other stressful events, increased with age, and decreased shortly before death. The last finding is especially intriguing in that research on lifespan developmental psychology has suggested that just before people die they experience a marked decrease in cognitive functioning, called a terminal drop. In another study, Suedfeld and Piedrahita (1984) examined the correspondence of 18 eminent individuals during the last 10 years of their lives. Supporting the hypothesis of terminal drop, they found that integrative complexity scores fell markedly in the last 5 years before death for those who died of a protracted illness and during the year immediately prior to death for those who died suddenly.

In general, research suggests that high levels of integrative complexity are associated with making more informed and well-balanced decisions, with open-mindedness and tolerance for ambiguity in confronting complex issues, and with cognitive self-direction. Nonetheless, high integrative complexity can sometimes come with a cost. High scorers sometimes find it difficult to make a clear-cut decision based on firm moral principles. For example, during the debate on slavery before the American Civil War, moderate leaders and politicians who sought compromise on this issue tended to score high on integrative complexity, based on coding of their public speeches. By contrast, the abolitionists—who argued strongly that slavery should be abolished—tended to score low, as did the leaders and politicians who defended slavery. We see here that what virtually everybody today would view as the morally right choice—to abolish slavery—was most strongly pushed and clearly articulated by leaders whose speeches scored relatively low for integrative complexity. (Interestingly, their arch-opponents—leaders arguing in favor of keeping the slavery system in place—also scored low.) By contrast, those leaders adopting more complex and integrative arguments took intermediate, and morally compromised, positions in the debate—for example, they argued that slavery might still be tolerated in the South but prevented from spreading to the new territories of the United States. In this interesting and troubling historical case, high levels of integrative complexity seem to have clouded people’s moral vision (Tetlock, Armor, & Peterson, 1994).

In another study suggesting costs for high integrative complexity, researchers studied interactions among graduate business management students (Tetlock, Peterson, & Berry, 1993). The students showing high levels of integrative complexity were rated by their peers as more creative, as might be expected, but also as more disagreeable, narcissistic, and lacking in conscientiousness. The students low in integrative complexity were viewed as simple, acquiescent, and conforming, but they were also seen as being warm, giving, and more self-controlled, compared with the students high in integrative complexity. In some situations, then, there would appear to be an interpersonal downside for high integrative complexity.

**Social-Cognitive Theory and the Person**

Contemporary social-cognitive approaches in personality psychology view the person as a more-or-less rational and planful knower who actively seeks information in the social world and draws upon a rich storehouse of social knowledge in order to regulate his or her own behavior and enact plans and goals in a wide range of social environments (Cantor & Kihlstrom, 1989; Cantor & Zirkel, 1990; Cervone & Shoda, 1999b; Higgins, 1999; Kihlstrom & Hastie, 1997; Markus & Wurf, 1987; Shoda, 1999). Like Kelly, these approaches suggest that people are especially adept at construing and anticipating social situations in ways that enhance their ability to predict and control the social world. Within the rich storehouse of social information upon which people routinely draw are their most salient personal constructs for categorizing social experience. In their emphasis on human agency and their portrait of an active and self-organizing knower, social-cognitive theories also underscore themes that are at the heart of some humanistic approaches to personality, including especially Deci and Ryan’s (Chapter 7, this volume) self-determination theory. These theories provide an optimistic
Filling in the Details: Characteristic Adaptations to Life Tasks

Religious Values and Personality

The United States is one of the most religious societies in the Western industrialized world (Sherkat & Ellison, 1999). For many Americans, religious values exert an important influence on their self-conceptions and their views of the world. As such, religious values and beliefs are good examples of characteristic adaptations in personality—individual-difference variables that shape motives, goals, and social-cognitive aspects of personality—are more specific and contextualized features of psychological individuality than are dispositional traits.

For most of the 20th century, psychologists either ignored or dismissed the role of religion in personality and mental health. In the last 10-15 years, however, many researchers have finally turned their attention to religion and religious values. They have conducted medical, psychological, and sociological studies and surveys that measure many different aspects of religious experience, such as religious affiliation, church attendance and participation, religious behaviors (e.g., prayer, meditation), and religious methods for coping with adversity and stress. The bottom-line finding is that, at least among Americans, religious beliefs and participation in religious activities tend to be positively associated with many features of physical and mental health (Dillon & Wink, 2004; Emmons & Paloutzian, 2003; George, Ellison, & Larson, 2002; Seybold & Hill, 2001). Religious involvement is even associated with lower mortality (i.e., longer life) (McCullough, Hoyt, Larson, Koenig, & Thoresen, 2000).

Religious involvement is positively associated with many indices of physical health and wellness. Those who attend religious services on a regular basis, for example, tend to live longer than those who are not involved in religious organizations, and they tend to lead healthier lifestyles. They are less likely to use tobacco and illegal drugs, and they show lower levels of alcohol abuse. Their blood pressure and cholesterol levels tend to be lower. Religious involvement is associated with lower levels of heart disease, cirrhosis, emphysema, stroke, kidney failure, and cancer mortality. Following major surgery, highly religious adults tend to show fewer health complications and lower levels of stress compared to less religious adults. With respect to mental health, religious involvement is positively associated with self-esteem, life satisfaction, and overall psychological functioning. Religious involvement predicts lower levels of depression, delinquency, criminal behavior, and even divorce. A strong predictor of marital happiness is a couple’s mutual involvement in religious activities. The positive effects of religion appear to be especially powerful among African Americans and among socially marginalized groups in American society.

The benefits of religion may stem from many sources. In the United States, churches, synagogues, and mosques provide members with close-knit communities where people share values and goals and care for each other during difficult times. People develop close friendships in religious organizations; they join informal support groups of various kinds; they come to associate with a broad range of individuals who may be of help to them in many different ways. Ministers, priests, rabbis, and other religious leaders may provide counseling or offer advice as to how a troubled member may obtain help from social-service agencies and other community-based resources. Religious involvement enhances social support and raises a person’s social capital—the network of social relations upon which a person may draw to meet the many different challenges of life (Putnam, 2000). Higher levels of social support and social capital are themselves good predictors of health and well-being.

Strong religious values provide some people with answers to deep questions about life, providing a sense of security and hope in the face of adversity. Some researchers have speculated that the kind of security and optimism that some especially religious people enjoy may exert a calming physiological effect. Chronic activation of the body’s sympathetic nervous system—associated with heightened levels of fear and anxiety—has been linked to illness and reduced longevity. Religious involvement may help to lower chronic stress and reduce the wear and tear on the body’s vital organs that come from repeated overactivation of the sympathetic nervous system.

The positive effects of religion are especially evident when people express what psychologist Kenneth Pargament (2002) calls intrinsic religious values and positive religious coping. Intrinsic religious values come from within; they reflect religious choices that people
have made freely and thoughtfully. By contrast, extrinsic religiosity may feel forced or coerced and is motivated by guilt, fear of rejection, or social conformity. Intrinsically religious people show higher levels of well-being, sociability, and intellectual flexibility, and lower levels of depression, anxiety, and social dysfunction, compared to extrinsically religious people. When facing difficult periods in life, intrinsically motivated people often use such positive coping strategies as praying to God for assistance, seeking support from clergy and congregation members, and looking for positive blessings amidst adversity.

Pargament also suggests that certain especially severe and rigid forms of religion—such as Christian fundamentalism—appear to show both negative and positive correlates. Research has consistently shown that adherents to strict, fundamentalist religious viewpoints tend to be more narrow-minded, authoritarian, and prejudiced. Among Christians, Jews, Muslims, and Hindus, strict fundamentalism in the United States has been associated with such positive features as optimism, religious and spiritual well-being, and marital satisfaction. Pargament writes: "Strict systems of religious belief and practice provide individuals with an unambiguous sense of right and wrong, clear rules for living, closeness with like-minded believers, a distinctive identity, and, most important, the faith that their lives are sanctioned and supported by God. These are strong advantages" (2002, p. 172). At the same time, these advantages may exact social costs such as intolerance for those who do not share the same beliefs.

SOCIAL INTELLIGENCE

Nancy Cantor and John Kihlstrom argue that the key to understanding personality coherence is social intelligence (Cantor & Kihlstrom, 1985, 1987, 1989). Each person brings a set of skills, abilities, and knowledge to every social situation. Such "lawful intraindividual variability, especially across situations, is precisely the characteristic we ascribe to intelligence" (Cantor & Kihlstrom, 1985, p. 16). They write, "intelligent action, as contrasted with the instinctual or the reflexive, is flexible rather than rigidly stereotyped, discriminative rather than indiscriminate, and optional rather than obligatory" (p. 16). The implication is that people differ in social intelligence. Some people appear to have more than others. More important, however, people use their social intelligence in different ways to interpret and solve current tasks and problems in life.

In Cantor and Kihlstrom’s view, social interaction involves problem solving. The social world confronts each of us with a series of mundane and momentous problems that call for socially intelligent behavior. We must interpret each problem we encounter and devise a strategy for mastering it, or at least for coping with it. For each social situation, the person asks such questions as "What do I want here?" "What are the likely consequences of my actions?" "How can I get what I want?" In working through the various facets of a social problem (situation), the person draws extensively on a repertoire of social intelligence, which "is stored in memory as organized knowledge" and which "forms the structural basis for personality" (p. 18).

Social intelligence consists of three different kinds of organized knowledge: concepts, episodes, and rules. Concepts and episodes may be grouped together as aspects of declarative knowledge. Think of them as "things" that are contained in the information storehouse. Concepts are the abstract and categorical things contained in the storehouse, such as concepts of who you are and what you typically expect to happen in social life. Concepts are aspects of what Cantor and Kihlstrom call declarative-semantic knowledge. Episodes are more concrete and particular
kinds of things contained in the storehouse, such as memories of particular scenes in your life. These make up declarative-episodic knowledge. The distinction between the two forms of declarative knowledge—concepts (declarative-semantic knowledge) and episodes (declarative-episodic knowledge)—is a fundamental distinction in cognitive psychology. Many cognitive psychologists believe that the brain processes these two kinds of declarative knowledge very differently (Klein, Loftus, & Kihlstrom, 1996).

Consequently, your conception of yourself as, say, “an honest person” (declarative-semantic) involves different brain processes and is itself a very different piece of knowledge compared with your memory of one particular episode in your life (declarative-episodic) in which you acted in an especially honest fashion. In contrast to both concepts and episodes, rules are aspects of what Cantor and Kihlstrom identify as procedural knowledge. Whereas concepts and episodes are like things contained in the mind’s storehouse, rules are not things but rather procedures or processes that determine how things are used.

Among the most important concepts that make up declarative-semantic knowledge are your concepts of self, others, and social interaction—all of which you have accumulated over the many social experiences that make up your life. Every person has accumulated a very large store of concepts about who he or she is, what other people are like, and what a person should expect to happen in social interaction. Concepts of self are perhaps the most salient components of declarative-semantic knowledge, and I will have much more to say about them later in this chapter when I consider the topics of self-schemas, self-complexity, possible selves, and self-guides. Among the different concepts of other people contained in declarative-semantic knowledge are what Mark Baldwin (1992) calls relational schemas. Relational schemas are mental representations of especially important interpersonal relationships that a person has experienced. Baldwin’s idea is very similar to what you may recall from Chapter 2 as the notion of “working models” of attachment relationships.

Over the course of social life, we each come to expect certain kinds of interactions with certain people. Therefore, your relational schema (working model) of your relationship with your mother may involve her tending to reprimand you when you are not especially conscientious, whereas your relational schema for your interactions with your best friend may involve having lots of fun and staying up late at night talking about your problems. Our relational schemas guide and shape our expectations and reactions in social relationships, and as social relationships unfold they may also come to influence our relational schemas. As important aspects of declarative-semantic knowledge and, more generally, social intelligence, relational schemas serve as “cognitive maps in navigating the social world” (Fehr, Baldwin, Collins, Patterson, & Benjafield, 1999, p. 301). There will be more to say about mental representations of attachment relationships at the end of this chapter.

Our declarative-semantic knowledge about self and other may also encode our expectations about the extent to which certain human attributes may or may not change over time. Take, for example, the attributes of “intelligence” and “honesty.” Rachel may take it for granted that these attributes are more-or-less fixed for any given person. In other words, Rachel believes that the “amount” of intelligence or honesty that a person “has” does not (and cannot) change much over time. A smart person will remain smart; a person who is not very smart is not likely to get much smarter over time. By contrast, Katie believes that these attributes develop over time. People can become smarter over time, with experience and training. People who are not very honest may become more honest over time with the right kind of social experiences, she believes. Rachel and Katie show contrasting implicit theories about the nature of human attributes. According to Carol Dweck (1996; Dweck, Chiu, & Hong, 1995), Rachel holds implicitly to an entity theory of human attributes—attributes are fixed entities that do not change over time. By contrast, Katie appears to believe in an incremental theory—attributes are malleable and can change incrementally over time. Dweck’s research shows that people who hold entity-based theories tend to interpret their own and other people’s actions in terms of fixed traits (“I failed the test because I am dumb”); “He stole the bread because he is dishonest”), whereas those holding incremental theories focus less on
A leading social and personality psychologist, Carol Dweck has examined different lay theories that people abide by in making sense of concepts like “intelligence” and “personality.” A person with an implicit entity theory assumes that the characteristic in question (e.g., one’s intelligence, some aspect of one’s personality) is a fixed entity that cannot be changed by in making sense of concepts like “intelligence” and “personality.” A person with an implicit entity theory assumes that the characteristic in question (e.g., one’s intelligence, some aspect of one’s personality) is a fixed entity that cannot be changed. By contrast, the person with an implicit incremental theory of the characteristic believes that it is malleable and can be changed or even improved over time and with effort. (SOURCE: Courtesy of Carol Dweck, Columbia University)

The entity and incremental theories that people hold in their heads regarding their own and others’ intelligence are examples of a broader class of lay theories upon which we all draw when trying to understand ourselves, other people, and the social world (Molden & Dweck, 2006). Lay theories are our implicit assumptions regarding the extent to which human attributes of many different kinds are either fixed (entity-based) or malleable (incremental-based). In other words, the basic distinction between entity and incremental theories goes well beyond intelligence to encompass how people think about the nature of the self and the social world. A person can think of his or her own personality tendencies as either fixed entities or malleable characteristics. Take shyness as an example. Mark and Renee may both see themselves as especially shy people. Both know that they often feel uncomfortable in the presence of people, especially when those people are strangers, and that they are often reluctant to seek out social interaction. But Mark holds an implicit entity theory of shyness in his head, whereas Renee operates according to an implicit incremental theory regarding her own shyness. Therefore, Mark believes that he has always been shy and will always be shy and that there is not much he can do about this issue. By contrast, Renee feels motivated to work on her shyness, believing as she does that this particular aspect of her personality can be modified in some ways and under certain conditions. In a series of experiments, Beer (2002) has shown that shy incrementalists, like Renee, prefer to engage in relatively challenging social interactions that they believe might help them develop new social skills, even though they find these interactions to be difficult. By contrast, shy entity theorists, like Mark, typically take the easier way. They choose to interact only in those comfortable situations that do not challenge their social skills.

Lay theories also influence how people perceive others. Take stereotyping as an example. People who hold entity theories regarding certain racial, ethnic, and/or gender stereotypes tend to perceive and pay most attention to information that confirms their stereotypes, whereas those who hold incremental theories regarding these same stereotypes tend to perceive and pay attention to information that could potentially disconfirm their initial biases (Molden & Dweck, 2006). If, for instance, Darryl believes that women are inherently weaker and more dependent than men (and that this inherent tendency in women is like a fixed entity), he is likely to perceive and remember examples in his life where he witnessed women acting in a weak or dependent manner and ignore or discount situations in which women act in strong and independent ways. By contrast, Michael may hold the same stereotype about women, but if his view is guided more by an incremental as opposed to entity theory, he is likely to pay more attention, than will Darryl, to information that goes against his original assumptions. Counter-stereotypical information may have more of an effect on Michael than on Darryl. And therefore, Michael is more likely to change his stereotype over time if he is confronted with information that challenges it. For Darryl, by contrast, his entity theory keeps him from seeing the information that challenges the stereotypes he holds.
Because Darryl believes that his stereotype is a fixed entity, it essentially becomes just that—a fixed entity.

According to Molden and Dweck (2006), the same person may hold many different lay theories about different domains of life. For example, I may be an entity theorist when it comes to my intelligence and my mechanical abilities (I cannot fix anything; never have been able to, never will be able to) but an incremental theorist when it comes to my understanding of my social skills and my religious beliefs. Research has suggested that people hold lay theories regarding emotions, and that whether a person is an entity theorist or incremental theorist about emotion has a strong impact on how he or she regulates his or her own emotions and deals with changing moods (Tamir, John, Srivastava, & Gross, 2007). People even hold lay theories about their relationships with others (Finkel, Burnette, & Scissors, 2007; Knee, Patrick, & Lonsbary, 2003). Entity theories suggest that the relationship is either “destined to be” or not; people who hold entity theories regarding their love relationships tend to believe that any problems they experience are troubling signs of the relationship’s inherent problems, and they therefore try hard to avoid conflict in the relationship. By contrast, incremental theories of relationships suggest that the relationship is what people make it to be and that it can, therefore, change substantially over time. People with incremental lay theories of their own relationships, therefore, tend to see problems in the relationship as opportunities for growth and show positive, improvement-oriented strategies for dealing with conflict in the relationship.

Lay theories are very good examples of what Cantor and Kihlstrom (1985) call declarative-semantic knowledge—implicit concepts we have regarding what people are like and how the social world works. As social-cognitive aspects of personality more generally, lay theories have strong implications for how people make sense of everyday life and how they plan their lives for the future. According to Molden and Dweck (2006), the link between lay theories and the future typically comes through goals. When people hold incremental theories in a given domain of life, they tend to set goals for themselves that are aimed at changing or developing the particular area of relevance for the theory. When people hold entity theories, by contrast, they are more motivated to avoid situations and information that challenge whatever their fixed notions are. For an entity theorist, I am what I am (and you are what you are). For the incrementalist, I am (and you are) always becoming something new.

If declarative-semantic knowledge, like lay theories, speaks to the guiding concepts people hold regarding the self and social life, procedural knowledge refers to characteristic processes of self- and social-knowing. Procedural knowledge consists of various competencies, strategies, and rules “that enable us to form impressions of others, make causal attributions, encode and retrieve social memories, and predict social behaviors” (Cantor & Kihlstrom, 1985, p. 20). People operate according to a great many rules and strategies when engaging in socially intelligent behavior, and many of these rules are outside conscious awareness. Of special interest are causal attributions—how people understand the causes of events. Bernard Weiner (1979, 1990) developed a well-known scheme for understanding causal attributions, especially as they apply to outcomes of success and failure. To explain why a person succeeded or failed in a given task, we often resort to one or more of four basic attributions: ability, effort, task difficulty, and luck. Why, for example, did Maria receive a low grade on her term paper for American Literature 101? Her failure to do well on this assignment might be explained in terms of ability: Maria is simply not a very good writer. Or it may be explained in terms of effort: Maria did not put much time into the paper; she didn’t try hard enough. Both ability and effort are internal attributions. They suggest that the cause of Maria’s failure lies in factors within Maria—her poor ability or her weak effort. By contrast, we may explain Maria’s failure in terms of task difficulty: The assignment was too hard, too ambiguous; perhaps, the professor expected too much or failed to give the students enough time to write a good paper. Or we may say that Maria was just plain unlucky on this assignment. During the same week that her paper was due, Maria’s boyfriend broke up with her and her mother called to say that she did not have enough money to pay the recent tuition bill. Because of her bad luck, Maria was distracted and failed to write...
the kind of paper she would normally write. Task difficulty and luck are external attributions: The causes of her failure are in the environment, not in Maria herself. The four attributions may also be organized along the lines of stability. Ability and task difficulty refer to stable factors; effort and luck are unstable. Maria’s luck may change or she may try harder next time.

In general, people tend to make internal and stable attributions when accounting for successes in their lives. Had Maria received an “A” on the assignment, she might attribute her good fortune to her strong writing ability. By contrast, people tend to make unstable attributions when accounting for failure—not trying hard enough, or bad luck. In the wake of a failure, an unstable attribution has the advantage of suggesting that things are likely to change in the future. It would seem, therefore, that explaining failure in terms of momentary causes such as effort or luck helps protect one’s self-esteem. Things will be better next time. I’m still okay. Nonetheless, people differ markedly in their characteristic attributional patterns. As we will see later in this chapter, some empirical evidence suggests that chronically depressed people tend to make causal sense of their successes and failures in ways that go against the norms. They may tend to explain their own successes in terms of unstable factors (e.g., “I got lucky”) but their failures in terms of causes that are internal and stable (e.g., “I failed because I’m stupid”).

SELF-SCHEMAS

A central concept in social-cognitive approaches to personality is the schema. A schema is any abstract knowledge structure. Fiske and Taylor (1984) write that a schema is a “cognitive structure that represents one’s general knowledge about a given concept or concept domain” (p. 13). There are many ways to think about schemas. You may view them as “filters” or “templates” that we use to perceive, organize, and understand information, much like Kelly’s concept of a “personal construct.” Neisser (1976) writes that a schema is like a “format” in a computer-programming language. Formats specify that information must be of a certain sort if it is to be interpreted coherently. The format allows the program to deal effectively with a particular kind of information while ignoring or downplaying the rest. A person’s schemas go beyond the information given by (a) simplifying information when there is too much for the person to handle efficiently and (b) filling in gaps when information is missing.

Every person employs a large set of schemas to make sense of the world. Social-cognitive approaches to personality contend that human adaptation is accomplished through the schematic processing of social information. Furthermore, schemas are applied to the self. Each person builds up a view of the self, a self-schema or series of self-schemas that structure the processing of self-relevant information and guide behavior. A self-schema is like all other schemas in that it simplifies incoming information and fills in gaps when information is missing. For example, if an important part of a young man’s self-schema is the idea that he is especially attractive to women, he is likely to pick up information from the social environment that confirms his view and ignore or fail to process information that seems irrelevant. Seeing the puzzled facial expression of a woman sitting next to him in class, he may assume that she is thinking of him and wondering if he might ask her out. But self-schemas differ from other schemas, too. Self-schemas are generally (a) larger and more complex than other schemas, (b) richer in their network of associations and relationships among components, (c) more frequently activated in daily information processing, and (d) loaded with emotion (Markus & Sentis, 1982). One’s own self-schema contains a vast and complex array of emotionally laden information. For each of us, it is probably our most popular, most frequently used schema.

The self-schema does not contain all information about the person. Rather, it emphasizes personally significant information about the self. We tend to place at the center of the self-schema those self-defining properties such as our name, representative aspects of physical appearance, significant personal relationships, and perceived traits, motives, values, and goals that we view as
most representative of who we are. Figure 8.3 illustrates a small portion of a hypothetical person’s self-schema. Many concepts may be linked with the self-schema, because we experience most things with reference to the self. In Figure 8.3, the self is linked to food and graduate school. Other concepts in memory that are not self-relevant, such as “ladders” and “gorillas,” are not shown as connected to the self. Repeated associations of the self with other concepts and structures will lead to stronger and more certain links. Eventually, there may be some overlap between the self and another concept, as when a person takes up jogging and comes to see him- or herself as possessing many of the characteristics of other joggers.

A major finding in research on self-schemas is that people process information that is especially relevant to their self-schemas in highly efficient ways (Lewicki, 1984; Markus, 1977, 1983; Markus & Smith, 1981). In a classic study, Hazel Markus (1977) investigated the dimension of “independence–dependence” in self-schemas. Depending on how college students presented themselves in an initial phase of her research, Markus classified each as having a strong independence schema, a strong dependence schema, or as aschematic (having neither). Three to 4 weeks later, the students participated in an experiment in which adjectives were presented on a screen one at a time. The adjectives were either schema-relevant (related to independence or dependence) or schema-irrelevant (related to the dimension of “creativity”). The student’s task was to press one of two buttons, labeled either ME or NOT ME, to indicate whether the adjective described him or her.

Those students whose self-schemas underscored dependence showed faster reaction times in response to dependent adjectives than they did to schema-inconsistent (independent) adjectives and schema-irrelevant adjectives. Markus concluded that the dependent schematics were accustomed to thinking of themselves as “conforming,” “obliging,” and so on and could, therefore, make these judgments more quickly. The independent schematics showed a similar pattern of results, with faster reaction times to independent adjectives. The aschematics, on the other hand, did not differ at all.
in their processing times for dependent and independent words. Aschematics appeared not to have defined themselves with respect to independence and to be equally at ease labeling their behavior in these terms. They apparently did not have a structure for independence–dependence to guide their processing of information about the self.

Studies similar to Markus’s have shown that people with self-schemas emphasizing particular areas are readily able to (a) evaluate new information with respect to its relevance for the particular area, (b) make judgments and decisions in the domain with relative ease and certainty, (c) retrieve episodes and other behavioral evidence from their past that illustrates the particular area, (d) predict future behavior in the area, and (e) resist information that is counter to the prevailing schema (Markus & Smith, 1981).

Markus (1983) hypothesizes that a self-schema emerges as a person begins to experience feelings of personal responsibility in a particular domain of behavior. “Acquiring a self-schema becomes equivalent to staking out a personal claim in a given behavioral arena,” writes Markus (1983, p. 561). “It is as if one is saying ‘I have control over my actions here’ (or ‘I would like to have control over my actions here’) or ‘I am both the cause and the consequence of actions in this domain’.” As a self-schema develops, the person becomes more concerned with his or her own behavior in the particular domain and seeks to exert control over the causes and consequences of that behavior.

Individuals differ from one another in regard to the kinds of self-schemas they develop. Differences in the content of self-schemas—the self-relevant material contained within a schema—are virtually infinite in that no two people see themselves in identical ways. Differences in the structure of self-schemas can also be observed. For instance, some people present highly articulated and complex self-schemas, whereas other people see themselves in simpler terms (Linville, 1987), a personality difference that is called self-complexity. Some people have many different self-aspects, which are kept relatively separate from one another. Each aspect of their self-schema may be connected to a particular role they play in life, but the different roles may be relatively unconnected. Therefore, should they experience failure or trouble with respect to one area in their self-schema, other areas may remain relatively unscathed. In a sense, these people with high levels of self-complexity manage to compartmentalize the many different aspects of the self-schema, such that what happens in one aspect has little effect on the others. By contrast, people low in self-complexity present a less differentiated self-schema. For people low in self-complexity, feelings associated with a bad event in one aspect of life tend to spill over into other aspects as well. In the wake of failure in one domain, misery may spread quickly across the entire self-schema (Dixon & Baumeister, 1991; Linville, 1987; Rafaeli-Mor & Steinberg, 2002).

POSSIBLE SELVES: WHAT I MIGHT BE; WHAT I MIGHT HAVE BEEN

A significant portion of our behavior may be guided as much by who we might be as by who we are. A young man trains for years to become an Olympic swimmer. A struggling author labors over what she hopes will become “the great American novel.” A married couple save all their extra money so that they will never sink into poverty. In each of these cases, the person strives to become something, or to avoid becoming something, that he or she is (currently) not. In these and countless other instances, people behave according to what Markus and Nurius (1986) call possible selves. Possible selves “represent individuals’ ideas of what they might become, what they would like to become, and what they are afraid of becoming.” They are “the cognitive components of hopes, fears, goals, and threats and they give the specific self-relevant form, meaning, organization, and direction to these dynamics” (Markus & Nurius, 1986, p. 954).

In the view of Markus and Nurius (1986), the self-schema contains multiple generalizations about the current and past self as well as prominent possible selves that link the self to the future. The possible selves that we wish to become in the future might be “the successful self, the creative
Research on possible selves and on self-guides suggests that people tend to formulate multiple self-conceptions. We may feel that we assume one kind of self in certain areas of our lives and another (perhaps contrasting) kind of self in certain other areas. (SOURCE: Stockbyte/SUPERSTOCK)

Each possible self is a personalized construction that has been articulated in rich detail. Therefore, if one of my dreaded possible selves is “the unemployed self,” then I am likely to have developed a painfully clear picture of what this self would be like. I might imagine myself losing confidence in my ability to support my family, having to sell the house, struggling to get by on food stamps, living in an overpriced and undersized apartment in a “bad section” of the city, spending long hours with nothing to do, applying for menial jobs for which I feel overqualified, being humiliated in the presence of my parents, resenting my peers who have profitable jobs, gradually sinking into despair and hopelessness. Although many people may fear unemployment, my unemployed self is personally crafted to be unique to my personality. If this is an important possible self within my general self-concept, then I am likely to go to great lengths to avoid its realization.

Markus and Nurius (1986) view possible selves as the crucial link between motivation and cognition in self-understanding. They contend that people are motivated by strong internal needs, desires, and inclinations. But these motivational dynamics are not activated in personality functioning until they are transformed into self-relevant form. Therefore, my fear of being unemployed may be a personalized translation of a strong “power motive” (Chapter 7, this volume) combined with certain fears rooted in my past history. Motives, fears, desires, hopes, and dreams are given expression through possible selves. In this sense, then, possible selves function first as incentives for future behavior—they are selves to be approached or avoided.

A second function of possible selves is self-evaluation. Possible selves provide frameworks by which the person can evaluate how well or poorly his or her life is going. Possible selves are therefore powerful structures for determining the meaning of personal events. For example, a junior in college who desires to become a physician will evaluate her current standing with regard to that possible self in very negative terms should she be carrying an extremely low grade point average. Her boyfriend, whose most cherished possible self involves his future career as a professional athlete, will feel good about his prospects after being drafted for a professional team. His equally low grade-point average has less impact on his self-evaluation in that it is not linked to a dominant possible self.

Possible selves include not only what a person thinks he or she might be in the future but also what a person thinks he or she might have been. What a person might have been represents what Laura King and her colleagues call the lost possible self (King & Hicks, 2006, 2007). In a series of intriguing studies, King has asked people who have experienced profound changes in their lives to imagine what might have been had these changes not occurred. In one study, she asked mothers of infants diagnosed with Down syndrome to talk about what their dreams for their child were now and what they might have been had their children not suffered this major cognitive disability (King, Scollon, Ramsey, & Williams, 2000). In another study, King and colleagues asked women who had divorced after relatively long marriages to talk about what their current plans and hopes for the future are now and what they might have been had the marriages remained intact (King & Raspin, 2004). In a related line of research, King and Smith (2004) asked gay and lesbian students to talk about what their plans for the future might have been had their sexual orientation turned out to be of the conventional

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heterosexual variety. In all three studies, the respondents were asked to consider the "what might have been" in their own lives had things turned out differently than they actually turned out. A major finding in King's studies of lost possible selves is that current happiness tends to be associated with the extent to which people are able to let go of their lost possible selves and invest energy in their current goals for the future (King & Hicks, 2006, 2007). Divorced women who wallowed in their fantasies of what might have been had their marriages remained intact, to the exclusion of articulating a clear possible self as a now-divorced woman, tended to show lower levels of self-reported happiness than did women who were able to distance themselves from what might have been and focus on what might now be their future position in life. Similarly, mothers of infants with Down syndrome who were unable to articulate clear and positive scenarios for the future of their disabled children, and who instead clung to the dreams they had when they believed their child would turn out to be cognitively "normal," tended to show lower levels of happiness and life satisfaction, compared to those mothers who developed clear and optimistic possible selves for their future as a mother-of-a-disabled-child.

A second major finding in King's work, however, qualifies her first conclusion. Although discounting the lost possible self and accentuating the current possible self predicted happiness in these studies, the same tendency was unrelated to psychological maturity. Instead, King found that those women who showed the highest levels of psychological maturity (measured via a concept called ego development, to be described in Chapter 9 in this volume) tended to articulate especially clear and detailed elaborations on their lost possible selves. In the divorce study, especially mature women spilled out psychologically rich and nuanced narratives of what might have been in their lives had they not experienced divorce. Their lost possible selves detailed what their hopes and dreams might have been, and they acknowledged the considerable pain they had experienced as a result of losing these once-upon-a-time dreams of the happily-ever-after. Consider these three accounts of lost possible selves written by especially mature women, the first from a woman recently divorced, the second from the mother of a child with Down syndrome, and the third from a lesbian who is imagining what might have been had she been heterosexual:

I imagined a deliciously happy "empty nest" syndrome. Neither of us [former husband and herself] likes to travel, but sports are a big priority. I figured we would exercise, go to see the Rangers/Mavericks/Cowboys, etc., together. I envisioned weddings with lots of family pictures. There would be grandchildren to babysit. Life would be calm, easy and sweet. (King & Raspin, 2004, p. 616)

Before I had my son, we were considering taking a job in California. I had visions of my blonde-haired son playing on the beach, being a movie star, or model. I also had planned on going back to work after a couple of months and continuing on with my career. I thought my son would ride his bike around the neighborhood with all his friends, play football, baseball, and all the other "boy" sports with the neighborhood children, effortlessly. I thought the developmental milestones would be attained, effortlessly. I thought the developmental milestones would be attained, effortlessly. (King & Hicks, 2006, p. 130)

Here I am happy—straight woman: I've lived independently for about five years after college, traveled my country and the greater part of Europe. During these years, I have scraped to get by but that is okay with me. I feel complete and whole as a strong independent woman. Nothing could be better until... I met HIM. He is worldly, strong, intelligent, and equipped with the best sense of humor of anyone I've met. Of course, he is also extremely good looking and loaded but not pretentious. We fall madly in love and live our lives as rich gypsies, traveling the world until we find the perfect place to call home and start a family. ... Our kids grow up in a nurturing non-judgmental environment. (King & Hicks, 2006, p. 130)

Accounts like these suggest a strongly developed sense of what might have been. Especially mature individuals are able to articulate highly detailed elaborations of lost possible selves. Furthermore, King and her colleagues have found that the tendency to do just this— that is, to articulate an elaborate and coherent story about what might have been—tends to lead to increases in maturity down the road. Following her participants over a 2-year period, King found that individuals who...
articulated detailed accounts of lost possible selves at Time 1 tended to show significant increases in ego development 2 years later. Not only were these people mature to begin with, but they became even more mature over time.

A central message from King’s research on possible selves is that a good life involves both happiness and psychological maturity. In these studies, those individuals who were both happiest and most mature were able to invest themselves in their current possible selves and were able to articulate especially detailed and psychologically rich portraits of what might have been—their lost possible selves. At the same time, they did not allow themselves to become bogged down in the past. Their ability to develop a rich psychological understanding of the life they might have lived did not keep them from investing considerable energy and thought into what their future life now would likely be. Lost possible selves are indeed lost, and we need to let them go. Yet we cannot and should not forget them completely. The happiest and most mature people develop a clear and nuanced sense of what might have been, and yet they are able to move on successfully in their lives with a clear sense of the positive possibilities inherent in new possible selves.

**DISCREPANCIES AMONG SELVES**

E. Tory Higgins (1987) suggests that self-knowledge encompasses three major domains: the **actual self**, the **ideal self**, and the **ought self**. The **actual self** consists of your representation of the attributes that someone (yourself or another) believes you actually possess. The **ideal self** consists of your representation of the attributes that someone (yourself or another) would like you, ideally, to possess—that is, a representation of hopes, aspirations, or wishes. The **ought self** consists of your representation of the attributes that someone (yourself or another) believes you should or ought to possess—that is, a representation of duties, obligations, or responsibilities. Each of the three domains, furthermore, may be seen from either the person’s **own** standpoint or the standpoint of a significant **other** in the person’s life, such as a parent, spouse, or friend. Therefore, the “actual/own self” consists of the characteristics that the person believes he or she actually possesses. The “actual/other self” consists of the characteristics that the person believes that a significant other believes he or she (the person) actually possesses. Similarly, Higgins distinguishes between “ideal/own self” and “ideal/other self” and between “ought/own self” and “ought/other self.”

According to Higgins’s (1987) **self-discrepancy theory**, problems occur when various selves in different domains or from different standpoints are inconsistent, or discrepant, with one another. Two kinds of discrepancies are especially salient, and each leads to a corresponding emotional reaction. Discrepancies between the **actual/own self** and **ideal** (either own or other) selves leads to the experience of **dejection-related emotions**, such as sadness, disappointment, and shame. In these cases, the person believes that he or she has been unable to attain hopes, dreams, or aspirations that either the person him- or herself or a significant other has set for him or her. When my own baseball performance failed to live up to my father’s (and my own) hopes and dreams, I felt dejected and downcast. A huge discrepancy between actual and ideal was revealed. On the other hand, discrepancies between the **actual/own self** and **ought** (either own or other) self leads to the experience of **agitation-related emotions**, such as fear, anxiety, guilt. In these cases, the person believes he or she has failed to live up to standards (established by self or other) for good, dutiful, or responsible behavior. The agitated emotions stem from the experience of feeling that one is being punished (by self or other) for not doing what one ought to do.

A number of research studies support Higgins’s characterization of the linkages between self-discrepancies and negative emotional experiences (Higgins, 1987). In most of these studies, college students list traits or attributes that describe the various selves that Higgins has identified. The researchers code matches and mismatches in traits across the various self domains. For instance, a person might describe his actual/own self as “ambitious,” “honest,” “sincere,” “friendly,” and “hot-tempered” and his ought/own self as “honest,” “friendly,” “easygoing,” “forgiving,” and
“helpful.” In this example, we can identify two clear matches—both lists contain “honest” and “friendly”—and one clear mismatch—“hot-tempered” and “easygoing” seem to be discrepant. The greater the number of mismatches, the greater the discrepancy and corresponding negative emotional reaction. The link between discrepancy and negative emotion is strongest, Higgins maintains, for self-domains that the person judges to be the most relevant in his or her life.

In one study, Higgins administered these kinds of self-description measures and (1 month later) various assessments of depression (involving dejection-related emotions) and anxiety (involving agitation-related emotions) to undergraduate students. Figure 8.4 displays the results. As predicted, actual/ought discrepancies predicted anxiety (but not depression), whereas actual/ideal discrepancies predicted depression (but not anxiety). Students who felt that they were not living up to their ideal selves reported high levels of sadness and depression. Those who felt they were not living up to their ought selves reported high levels of fear and anxiety.

Ideal selves and ought selves may be called self-guides in that they offer standards and goals to which a person may aspire and against which a person may compare his or her current life situation. Higgins (1997) argues that these two self-guides represent two very different motivational foci in social behavior. A promotion focus is associated with strong ideal self-guides, sensitivity toward positive outcomes, and approach strategies in social behavior. A prevention focus is associated with strong ought self-guides, a sensitivity toward negative outcomes, and avoidance strategies in social behavior. Higgins’s distinction between promotion and prevention focus is highly reminiscent of the distinction between the behavioral approach system (BAS) and the behavioral inhibition system (BIS) for personality traits, as I described in Chapter 5, and parallels distinctions between approach and avoidance goals that have been made by motivational and learning psychologists for many years (e.g., Lewin, 1935; Maslow, 1954; Miller & Dollard, 1941).

**FIGURE 8.4 SELF-GUIDES AND NEGATIVE EMOTION**

Discrepancies between actual and ought self-guides are associated with anxiety whereas discrepancies between actual and ideal self-guides are associated with depression.

NOTE: The numbers on the arrows are akin to correlation coefficients: the higher their values, the stronger the association.

*p < .01.

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Research conducted by Daniel Ogilvie (1987) has examined a different kind of discrepancy in self-conceptions. Whereas Higgins focuses on the extent to which the actual self differs from other positive selves (ideal and ought), Ogilvie turns things around to discern the extent to which the actual self is similar to undesired selves. Undesired selves contain attributes that the person fears, dreads, hates, and actively seeks to exclude from experience. Ogilvie suggests that we may be in closer touch with our undesired selves than with our ideal and ought selves. Our undesired selves are likely to be rooted in concrete past experiences in which we felt humiliation, despair, fear, anger, and so on. Our ideal and ought selves, on the other hand, are more hypothetical. They are abstractions toward which we strive but which we rarely attain.

Ogilvie (1987) obtained students' characterizations of their actual, ideal, and undesired selves and measured the “distance” between each student’s selves through a complicated statistical procedure that positions selves in a hypothetical space. Questionnaire measures of life satisfaction were also obtained. The results showed that the distance between a person’s ideal and actual selves was negatively associated with life satisfaction. In other words, the greater the discrepancy between ideal and actual, the lower the life satisfaction. The distance between a person’s undesired and actual self was positively associated with life satisfaction. People whose actual selves were “far away from” their undesired selves were happier with their lives. Most important, however, the second result was much stronger than the first. This is to say that the distance between undesired and actual selves was a much stronger predictor of life satisfaction than was the distance between ideal and actual selves. The implication of Ogilvie’s findings is straightforward and intriguing: If we want to be happy, we will do better to avoid being the way we dread being rather than striving to be the way we wish to be.

Research into the undesired self pushes us into thinking about those things in life that we most fear and that we seek most strongly to avoid. These are uncomfortable topics. Just how uncomfortable they may be is evident in one of Ogilvie’s recent experiments wherein he examined the effects of having people ponder their undesired selves (Ogilvie, Cohen, & Solomon, 2008). In one experimental condition students were asked to write a short paragraph describing “what you are like at your worst” (the undesired-self condition). In another condition, they were asked to write a short paragraph about their feelings regarding their own death (the death condition). In a third condition, students wrote about their best possible selves. In a fourth condition, students wrote about their experiences on an academic exam. Later, all the students in the four groups were asked to complete a task that assessed the salience of concerns regarding death. Not surprisingly, students in the death condition showed more concerns with death later in the study, compared to the students in the best-possible-self and exam conditions. However, students in the undesired-self condition also showed significantly higher levels of death concerns later in the study. Simply writing a few sentences about your worst possible self is apparently enough to stimulate thoughts of mortality. Our undesired selves hold such negative valence in our minds that when we begin to think about them our mind moves naturally in the direction of death.

SCHEMAS, ATTRIBUTIONS, AND EXPLANATORY STYLE: THE CASE OF DEPRESSION

Social-cognitive approaches to personality have proven especially valuable in efforts to understand the phenomenon of depression. In the past 25 years, there has been a veritable explosion of scientific research on the ways in which people who are chronically depressed process information in daily life. Scores of books and hundreds of scientific articles have addressed the topic. A number of major theories have been developed. While these theories differ from one another in important ways and while scientific research does not consistently support all of their tenets, a general theme cuts across all cognitive approaches to human depression: Depressed people perceive, understand, and interpret their worlds and themselves in a peculiar and dysfunctional way. Cognitive theories of depression do not deny that other noncognitive factors may be implicated in the experience of
The emotional experience of depression is associated with particularly negative thought patterns, such as negative schemata and an explanatory style that attributes negative events to internal, stable, and global causes. (SOURCE: William Casey / iStockphoto)

Depression, especially biological factors that may predispose some people to chronic depression. But they do assert that at the center of the depressive experience are depressive cognitions—depressive thoughts, beliefs, values, attributions, schemas. Some theories suggest that these cognitions cause the emotional feelings of sadness and despair; others suggest that the depressive cognitions are a result of depression.

Psychotherapist Aaron Beck was one of the first to offer a cognitive theory of depression (Beck, 1967, 1976). Beck observed that depressed people typically hold a negative view of themselves, are pessimistic about the future, and have a tendency to interpret ongoing experience in a negative manner. These negative interpretations lead to feelings of sadness and despair. During an episode of depression, the depressed person is caught in a downward spiral, as bad thoughts lead to bad feelings, which lead to more bad thoughts and more bad feelings. Therefore, depressed people tend to see the world through depressive schemas. Depressive schemas distort reality by casting information in a negative light. For instance, depressed people tend to recall more negative and unpleasant adjectives (such as bleak, dismal, helpless) in memory tasks than do nondepressed people (Derry & Kuiper, 1981; McDowall, 1984). They tend to have a difficult time recalling positive themes from stories (Breslow, Kocsis, & Beklin, 1981). Depressed people tend to recall unpleasant memories more rapidly than pleasant ones (Lloyd & Lishman, 1975). They tend to remember failures and forget successes (Johnson, Petzel, Hartney, & Morgan, 1983). In describing various positive and negative autobiographical memories, depressed college students tended to recall more different kinds of negative episodes from their pasts and fewer different kinds of positive episodes than did nondepressed students (McAdams, Lenkey, Duplc, & Allen, 1988).

Inspired by Beck’s schema theory, a good deal of the cognitive research on depression has assumed that depressives negatively distort reality. Ingram (1984) has argued that depressed people have a difficult time summoning up positive self-schemas, even in the wake of positive events in their lives. In one laboratory experiment, depressed and nondepressed college students were provided with either positive (“success” condition) or negative (“failure” condition) feedback concerning their performance on a multiple-choice test (Ingram, Smith, & Brehm, 1983). (The bogus feedback was not related to their actual performance on the test, though the students thought that it was at the time.)

The students then listened to a prerecorded set of 48 adjectives. After each adjective was presented, the student answered either “yes” or “no” to one of four different questions about the adjective:

1. Was the adjective read by a male? (structural question)
2. Does the adjective rhyme with _____? (phonemic)
3. Does the adjective mean the same as _____? (semantic)
4. Does the word describe you? (self-referent)

According to Ingram (1984), the four different questions call for four different levels of information processing. At the “deepest” level of processing is the self-referent question, for it asks the student to make a very personal judgment about the applicability of the adjective to his or her personality. At the most superficial levels are the structural and phonemic questions, which simply ask the student to make a judgment about the acoustical sound of the adjective as it was heard on the tape.

Following the tape and associated questions, each student was asked to recall as many of the adjectives as possible. The results are shown in Table 8.6. Nondepressed students tended to recall more positive self-references in the success condition (5.13) than in the failure condition (3.06).
Depressed students, on the other hand, recalled about the same number of positive self-referents in both conditions (3.04 vs. 3.33). The authors argued that the success feedback preceding the recall task activated a positive self-schema for the nondepressed students, sensitizing them to positive adjectives about themselves. Therefore, they recalled a large number of positive adjectives about themselves in the success condition. By contrast, the success feedback was not effective in activating a positive self-schema for the minds of the depressed students, who remembered about the same low number of positive self-referent adjectives in both conditions.

An influential cognitive approach to depression is Seligman and Abramson's reformulated learned-helplessness theory. In his early research with animals, Martin Seligman (1975; Seligman & Maier, 1967) discovered that dogs subjected to uncontrollable aversive stimulation, like random electric shocks, eventually become helpless and do not act to avoid the shocks even when they have a clear opportunity to do so. Analogously, Seligman reasoned, human beings subjected to uncontrollable negative events in life will eventually learn to be helpless and will become chronically depressed. In their reformulated interpretation of learned helplessness, Seligman and Abramson (Abramson, Seligman, & Teasdale, 1979; Abramson et al., 2002; Peterson & Seligman, 1984) link helplessness and depression to cognitive attributions, or what they have more recently called an explanatory style. They argue that depressed people experience the world in a helpless fashion by virtue of their characteristic patterns of assigning causality and explaining events.

According to the reformulated learned-helplessness model, depressed people tend to explain negative events in their lives as stemming from internal, global, and stable causes. For example, they may attribute their low grade on an examination to their own general “stupidity” — “I am generally stupid” (internal, global, and stable). On the other hand, depressed people tend to explain positive events in their lives as stemming from external, specific, and unstable causes. Therefore, they may view a high grade on an examination as a lucky break. The high grade might be due to an easy test (external) in a particular area (specific) that is not likely to occur again in the future (unstable). In essence, the depressive person’s explanatory style accentuates the importance of negative events by suggesting that they are due to broad and uncontrollable forces. At the same time, it minimizes the importance of positive events by suggesting that they are specific flukes that are not likely to recur.

The reformulated learned helplessness theory of depression has stimulated a great deal of thinking and research in personality and clinical psychology. A number of studies show that depressed people do tend to attribute failure to internal, global, and stable factors and that they are also especially likely to link these failures to thoughts of their own worthlessness (Abramson et al., 2002; Coyne & Gotlib, 1983; Peterson & Seligman, 1984; Peterson, Villanova, & Raps, 1985; Robins, 1988). Nonetheless, some researchers are skeptical about the claim that attributional patterns precede or cause depression. Teasing out causal relations requires longitudinal studies in which cognitions and depressive symptoms are monitored over time. Arguing against a causal role for depressive cognitive (explanatory) style are the findings from a 2-month longitudinal study of college students.

### Table 8.6: Self-Reference Scores for Recalled Words

<table>
<thead>
<tr>
<th></th>
<th>Success</th>
<th>Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressed</td>
<td>3.04</td>
<td>3.33</td>
</tr>
<tr>
<td>Nondepressed</td>
<td>5.13</td>
<td>3.06</td>
</tr>
</tbody>
</table>

and depressed outpatients undertaken by Cochran and Hammen (1985). Examining the results of that study, the authors concluded that “in terms of the direction of causality, the data were more consistent in indicating that depression causes cognitions than in indicating the reverse” (Cochran & Hammen, 1985, p. 1562). In support of the theory, however, other prospective longitudinal studies have shown that a depressogenic cognitive style predicts (precedes and leads to) either increases in depressive symptoms over time or the subsequent onset of depressive episodes (Alloy et al., 2000; Haefeli et al., 2003; Hankin, Abramson, Miller, & Haefeli, 2004).

Hankin, Fraley, and Abela (2005) enrolled college students in an intensive, 35-day study in which the students kept daily diaries recording their depressive symptoms and their cognitive interpretations of negative daily events. At the beginning of the study, the students completed measures of depressive tendencies, explanatory style, and other variables. A depressogenic explanatory style at the beginning predicted higher levels of depressive symptoms over the course of the 35 days. The results also revealed a moderate but significant trait-like consistency to the ways in which the students interpreted negative daily events. In other words, from day-to-day students tended to show somewhat similar patterns of interpretations: some consistently tended to interpret negative daily events as due to internal, stable, and global causes; whereas others consistently tended to interpret negative daily events in less depressogenic ways. And the students also showed fluctuation in these tendencies from one day to the next. Importantly, the fluctuations themselves were predictive of subsequent changes in depressive symptoms. Over the course of the 35 days, students who increased in their tendencies to explain negative events in depressogenic terms showed more depressive symptoms in subsequent days. Decreases in depressogenic explanations predicted decreases in depressive symptoms. The study provides strong evidence for the validity of the reformulated helplessness model. It shows that explanatory style itself is moderately consistent from one day to the next and that fluctuations in explanatory style over time tend to predict subsequent fluctuations in depressive symptoms.

A person’s characteristic explanatory style is a very important feature of the procedural knowledge that comprises an individual’s social intelligence. It should not be surprising, therefore, to learn that explanatory style is associated with a range of behavioral outcomes that go well beyond the phenomenon of depression. Researchers have examined the role of explanatory style in school achievement, job performance, success in sports, physical health, and longevity.

Nolen-Hoeksema, Girgus, and Seligman (1986) assessed explanatory style among schoolchildren. The children showed wide variation in characteristic styles, with some children exhibiting the kind of pessimistic style characteristic of depression. The children showing a pessimistic explanatory style (internal, stable, and global explanations for bad outcomes) were rated by teachers as showing more helpless behaviors and fewer mastery behaviors in school. They also scored lower in standardized achievement tests and, as has been shown with adults, scored higher on measures of depressive symptoms.

Seligman and Schulman (1986) studied life insurance sales agents over the course of 1 year. At the beginning of the year, the researchers measured the agents’ explanatory style. Agents showing the pessimistic explanatory style at the beginning of the year sold less insurance during the year than did the agents with an optimistic style. The agents with the pessimistic style were also more likely to quit the company. Seligman, Nolen-Hoeksema, Thornton, and Thornton (1990) used a similar methodology to study women’s and men’s college swimming teams. They found that pessimistic explanatory style measured at the beginning of the season predicted relatively poor swimming performance during the season.

Peterson, Seligman, and Vaillant (1988) reported results from a 50-year longitudinal study of men who graduated from Harvard College in 1938 and 1940. In 1946, when they were in their late 20s, 99 of the men who had served in World War II responded to open-ended questions about their difficult war experiences. The researchers scored these narrative accounts for explanatory style and then related the scores to the men’s subsequent physical health as assessed in periodic medical checkups. Explanatory style was a significant predictor of health over a 40-year span. Those men
For many students, their first interest in psychology comes through psychopathology. They are fascinated by the striking ways that behavior can go awry, how it can shade into the abnormal, the dysfunctional, and the bizarre. Therapists, counselors, and many researchers show the same fascination. The social-cognitive approaches to depression that we have surveyed in this chapter are but one example among thousands wherein psychological researchers have marshaled considerable resources to try to understand human psychopathology. Some psychologists, however, believe that the focus on all that can go wrong in human behavior and experience is too strong and that psychologists need to pay more attention to the many ways in which human behavior aims for the good. After spending 30 years studying depression, Martin Seligman decided that he wanted to examine the other side—the positive psychology of human life. In the late 1990s, Seligman helped to launch the positive psychology movement in the United States (Seligman & Csikszentmihalyi, 2000; Snyder & Lopez, 2002). The movement’s aim is to use the tools of science to understand and promote the many different ways that human behavior and experience can display goodness, excellence, beauty, and virtue.

For mental health professionals today, the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders (DSM; see Chapter 4, in this volume) provides a comprehensive classification system of over 300 psychological disorders. Put simply, the DSM spells out almost every possible way in which psychopathology can be manifest today. Might it not be useful to have something like this for all the good features of human behavior? Bringing together many different themes in the positive psychology movement, Peterson and Seligman (2004) developed a handbook for character strengths and virtues, to serve as a positive counterpart to the DSM. Surveying historical sources and scientific research, Peterson and Seligman listed 24 character strengths and virtues for human life, divided into the six main categories of (1) wisdom and knowledge, (2) courage, (3) humanity, (4) justice, (5) temperance, and (6) transcendence. Like the DSM, their list is something of a hodgepodge. It includes, for example, certain features of psychological individuality that map directly onto Big Five personality traits—such as the character strengths of open-mindedness (a feature of Openness to Experience or O; Chapter 5), persistence (a feature of Conscientiousness or C), and kindness (an aspect of Agreeableness or A). Certain other examples, however, seem to be especially good candidates for what personality psychologists and this book term “characteristic adaptations.” Virtues such as humility, fairness, gratitude, and forgiveness are specific and highly contextualized features of psychological individuality that do not fit easily into broad trait dimensions. Like motives (CONTINUES)
and goals (Chapter 7) and personal constructs, schemas, and possible selves (this chapter), individual differences in the extent to which people value and exhibit humility, fairness, gratitude, and forgiveness in life speak to important details of psychological individuality that are contextualized in time, place, and/or social role.

Robert Emmons and Michael McCullough have focused considerable research attention on the virtue of gratitude (Emmons & McCullough, 2004; McCullough, Emmons, & Tsang, 2002). Administering a self-report questionnaire designed to assess individual differences in gratitude, Emmons and McCullough have found that grateful people feel that they have much in life to be thankful for. They appreciate their amenities, their friendships, and the opportunities they have to find happiness and fulfillment. They see these good things as gifts they have received in life, rather than as achievements they have won or rewards they deserve. Research shows that people who consistently exhibit the virtue of gratitude tend to be happier overall than less grateful people. Gratitude is positively correlated with religiosity and spirituality in American samples, and it is negatively correlated with valuing material wealth.

Grateful people are more likely to help others and to engage in prosocial behavior. In one set of experiments, participants exposed to a condition designed to enhance their feelings of gratitude were much more likely than participants in other experimental conditions to provide assistance to strangers in distress, even when this help was especially difficult (Bartlett & DeSteno, 2006). Experiments like these indicate that gratitude is a highly variable and contingent psychological experience. Some people may be characteristically more grateful than others. But certain situations may bring out gratitude in all people, or suppress it. And people can learn to be grateful. Parents teach their children to say “please” and “thank you.” Ministers, priests, and rabbis lead their congregants in prayers of thanksgiving and often encourage them to adopt a more grateful attitude toward life. All of the world’s major religions identify gratitude as a central human virtue. How to give thanks, whom to give thanks to, what to be thankful for—these are monumental themes in some of the greatest stories in the Pentateuch and the Christian Bible (McAdams & Bauer, 2004). As Genesis tells it, the world’s first murder stemmed directly from a problem in gratitude! The two sons of Adam and Eve chose different modes for expressing their thanksgiving to God. Abel offered the first-born lamb as his burnt sacrifice to God, but Cain offered the produce of the earth. God was displeased with Cain’s offering. So distressed was Cain by God’s rebuff that he killed his brother.

In modern life, gratitude may qualify as a primary virtue for positive social interactions. McCullough and Tsang (2004, p. 123) describe gratitude as the “parent of the virtues”—the one that gives birth to other virtues. Being grateful, they argue, paves the way for expressing other positive virtues such as forgiveness, altruism, humility, kindness, appreciation, and awe. Furthermore, they believe that gratitude functions as a moral thermometer. A feeling of thankfulness may serve as a moral barometer, providing a reading of the moral significance of a situation and signaling a perception that one has been the beneficiary of another person’s moral actions. Gratitude motivates a person to respond to others in a gracious and prosocial manner. Gratitude also functions as a social reward that continues to encourage moral action in a social community. It may even be the case that evolution has predisposed human beings to feel gratitude in certain social situations, which ultimately serves well the interests of the individual (and the group).

Gratitude works together with a complex array of other human adaptations to build pleasing and mutually beneficial exchanges among individuals in ongoing social communities. Yet, for reasons that doubtlessly involve both genetics and environments, people differ markedly in their inclination toward gratitude, and they differ in the kinds of situations that evoke grateful responses. The positive psychology movement has turned researchers toward the investigation of individual differences in gratitude and other positive human attributes. In both science and everyday life, knowing a person deeply means understanding both a person’s shortcomings and his or her surpassing strengths, competencies, and virtues.

whose essays (written in their late 20s) showed an optimistic explanatory style exhibited significantly better health in their medical checkups in their 40s, 50s, and 60s, compared with the men whose essays showed a pessimistic explanatory style.

Another longitudinal investigation suggests that explanatory style may even predict how long people live! Peterson, Seligman, Yuki, Martin, and Friedman (1998) coded open-ended questionnaires written in 1936 and 1940 by participants in the Terman longitudinal study of the
intellectually gifted (Chapter 5, in this volume) for explanatory style. The open-ended questions asked the participants to account for disappointments, failures, and negative relationships they had experienced in their lives and to describe their most serious personal flaws. The globality aspect of explanatory style—attributing negative events to global causes—predicted mortality as of 1991. In other words, those individuals who tended to explain negative events in terms of global causes in their early to middle adult years tended to die earlier than individuals who used a more optimistic explanatory style. Explanatory style was especially predictive of untimely death among men, and it predicted especially well accidental and violent deaths. According to the authors of the study, attributing global causes to negative events is a form of cognitive catastrophizing. Globality taps a pervasive style of catastrophizing about bad events, expecting them to occur across diverse situations and thereby magnifying even small misfortunes into potential catastrophes. This kind of explanatory style is hazardous, they maintain, because it tends to be associated with poor problem solving, social estrangement, and risky decision making. If you believe that every bad event is indicative of a potential catastrophe, you may come to see the world as a frighteningly untrustworthy place—a place wherein it does not pay to be prudent and rational because all your good efforts may be swept away in a moment by large and uncontrollable forces. If you hold the belief that catastrophes will inevitably occur, you may even adopt a “who cares” or “what the hell” attitude about life (“It doesn’t matter what I do”).

MENTAL REPRESENTATIONS OF OTHERS: ATTACHMENT IN ADULTHOOD

Social-cognitive adaptations in personality include a wide range of cognitive categories and other mental representations that operate inside our heads to help us understand our personal experience and guide our behavior. Personal constructs, possible selves, characteristic attributional styles, and the like function as interpretive templates for making sense of the self and the world. Among the most important social-cognitive constructs in this rich mix of influences is a person’s mental representation of intimate relationships. Going back to Freud, many psychologists and laypeople alike have believed that the earliest bond of love between the infant and caregiver—what we examined in Chapter 2 as the attachment bond (Bowlby, 1969)—serves as the internalized model for all later relationships involving love and intimacy, across the human life course (Mikulincer & Shaver, 2007). Among the most influential social-cognitive adaptations in all of personality may be the mental representations that people hold, laid down in their earliest years, of what it means and how it feels to love another person.

Attachment theory (Bowlby, 1969; Mikulincer & Shaver, 2007) describes an affectional relationship between two persons through which one person provides support, protection, and a secure base for the other. The most obvious example of attachment, therefore, is the bond of love between the mature caregiver and the relatively defenseless infant. However, the dynamics of attachment may be played out in many other relationships, as well (Ainsworth, 1989; Bowlby, 1980). Psychological scientists have extended attachment theory into adulthood. Their studies on the topic have typically taken one of two forms. In one approach, researchers have examined adults’ stories of their own attachment histories and related those stories to other behavior, especially parenting (Main, 1991). In the second approach, researchers have administered questionnaires to assess individual differences in styles of attachment and examined how those styles play themselves out in romantic love and other important domains (Hazan & Shaver, 1987).

Mary Main and her colleagues (George, Kaplan, & Main, 1985; Main, 1991; Main, Kaplan, & Cassidy, 1985) developed an Adult Attachment Interview (AAI) in which men and women respond to open-ended questions about their recollections of their own childhood attachment bonds with their parents or other caregivers (see also Roisman, Fraley, & Belsky, 2007; Roisman et al., 2007). The adult is asked to choose five adjectives that best describe the relationship with each parent during
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childhood and then to provide an account of a particular episode from childhood illustrating each adjective. Later the adult is asked to describe what he or she did when upset as a child, to which parent he or she felt closer, whether he or she ever felt rejected as a child, why the parents may have acted the way they did, and how the early experiences may have affected the adult’s current functioning. Based on the interview, Main classifies each adult into one of four categories: secure/autonomous, dismissing of attachments, preoccupied by past attachments, and unresolved with respect to traumatic attachment-related events. Her research suggests that mothers with secure/autonomous attachments from childhood tend to raise securely attached infants themselves. Dismissing parents tend to have avoidant children (A-babies); preoccupied parents tend to have resistant children (C-babies); and mothers with unresolved attachments from childhood stemming from traumatic events such as abuse tend to have children with disorganized attachments (D-babies). In a prospective study, researchers administered the AAI to pregnant women expecting their first child and then conducted the Strange Situation (Chapter 2, in this volume) with their babies at age 1 year (Fonagy, Steele, & Steele, 1991). In keeping with Main’s results, adult attachments of pregnant women in the interviews tended to match the subsequent attachment classifications of their infants at age 1. (See Table 8.7.)

Main (1991) describes the AAIIs typically produced by secure/autonomous parents with securely attached children. Such parents “focused easily on the questions; showed few departures from usual forms of narrative or discourse; easily marked the principles or rationales behind their responses; and struck judges as both collaborative and truthful” (p. 142). An essential characteristic of their interviews appears to be the ease with which they are able to provide a coherent account of their childhood. Whether describing positive or negative experiences from childhood, secure/autonomous adults are able to fashion a story from childhood that is consistent and convincing. By sharp contrast, dismissing and preoccupied parents tend to be “relatively incoherent in their interview transcripts, exhibiting logical and factual contradictions, inability to stay with the interview topic; contradictions between general descriptors of their relationships with their parents and actual autobiographical episodes offered; apparent inability to access early memories; anomalous changes in wording or intrusions into topics; slips of the tongue; metaphor or rhetoric inappropriate to the discourse context; and inability to focus upon the interview” (Main, 1991, p. 143). In particular, dismissing parents of avoidant infants are usually distinguished for their insistence that they cannot remember much from their earlier years. Often they will idealize their parents in vague terms but be unable to provide behavioral proof for their claims. Preoccupied parents of resistant infants tend to provide lengthy but rambling responses about childhood that often contradict themselves. Finally, unresolved parents of infants displaying disorganized attachment tend to provide moderately coherent narratives of childhood, but they slip into magical and bizarre thought patterns when considering attachment-related events such as loss. “In these statements, the adult may indicate beliefs in ‘magical’ causality surrounding a death or other trauma, or subtly indicate a belief that a deceased attachment figure is simultaneously dead and alive” (Main, 1991, p. 145). Overall, these accounts lack plausibility. Just beneath the surface of a seemingly sensible narrative lie primitive and irrational thought processes linked with unresolved trauma from childhood.

<table>
<thead>
<tr>
<th>TABLE 8.7</th>
<th>CORRESPONDING ATTACHMENT TYPES FROM AAIs AND OBSERVATIONS OF INFANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Attachment Interview</td>
<td>Infant Attachment Type</td>
</tr>
<tr>
<td>Secure/autonomous</td>
<td>Secure (B-baby)</td>
</tr>
<tr>
<td>Dismissing</td>
<td>Avoidant (A-baby)</td>
</tr>
<tr>
<td>Preoccupied</td>
<td>Resistant (C-baby)</td>
</tr>
<tr>
<td>Unresolved</td>
<td>Disorganized (D-baby)</td>
</tr>
</tbody>
</table>

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A research review examined 33 studies that employed the AAI, sampling more than 2,000 adults, including mothers, fathers, and teenagers, from a number of different countries (vanlJzendoorn & Bakermans-Kranenburg, 1996). Each participant in each study was classified into one of Main’s first three adult attachment types and then rated independently with respect to the extent to which he or she showed any characteristics of the fourth type (unresolved). The distribution for the first three types read as follows: 58% secure/autonomous, 24% dismissing, and 18% preoccupied. In addition, 19% of the participants showed some evidence of being unresolved with respect to loss or trauma in their lives. No significant sex differences in the distribution of scores were observed. Mothers from low socioeconomic status were more likely to show dismissing attachment representations and to express unresolved trauma or loss compared with mothers from higher social classes. Secure/autonomous women and secure/autonomous men were more often married to each other than would be expected by chance, as was also the case for those showing evidence of unresolved loss and trauma. In addition, those men and women who suffered from psychopathology and mental illness of various kinds were significantly more likely to be classified in the insecure categories (dismissing, preoccupied, and unresolved) compared with nonclinical adults.

Research employing the AAI suggests that working models of attachment laid down in childhood may continue to influence adult behavior in the realm of caregiving. Cindy Hazan and Phillip Shaver (1987, 1990) were the first to extend this line of thought in a different direction by suggesting that working attachment models may also influence the ways in which adults engage each other in romantic love. Borrowing Ainsworth’s original division among B-babies, A-babies, and C-babies, Hazan and Shaver identified three corresponding attachment styles in adult love. (See Figure 8.5.)

Adults with a secure attachment style say they find it relatively easy to get close to others and are comfortable depending on others and having others depend on them. They don’t worry too much about others’ getting too close. They describe their most important love experiences as happy, friendly, and trusting. They emphasize being able to accept and support their partners despite their partners’ faults. Adults with avoidant attachment styles (akin to Ainsworth’s A-babies) report that they are somewhat uncomfortable being close to others and find it difficult to trust others completely. They are characterized by a “fear of intimacy,” by emotional highs and lows, and by excessive jealousy. Adults with anxious/ambivalent styles (akin to Ainsworth’s resistant C-babies) say they want to merge with others but that this desire sometimes scares other people away. They worry that their partners do not love them and will eventually abandon them. They experience love as involving obsession, desire for reciprocation and union, emotional highs and lows, and extreme sexual attraction and jealousy.

![Figure 8.5: Attachment Styles](source: Hazan, C. and Shaver, P. Journal of Personality and Social Psychology, 52, 515.)

Which of the following paragraphs best describes your feelings about being emotionally close to other people? Place a checkmark in front of the one paragraph that best describes you.

- I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don’t often worry about being abandoned or about someone getting too close to me. [Secure]
- I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being. [Avoidant]
- I find that others are reluctant to get as close as I would like. I often worry that my partner doesn’t really love me or won’t want to stay with me. I want to merge completely with another person, and this desire sometimes scares people away. [Ambivalent]

Employing a set of simple self-report questions concerning a person’s general view of romantic love, Hazan and Shaver (1987) reported that approximately 60% of their adult respondents were classified as securely attached, with the remainder falling within avoidant or anxious/ambivalent (resistant) categories. The breakdown is roughly comparable to the ratios of secure and insecure attachments obtained in research on infants. In addition, studies suggest a person’s overall attachment style is predictive of love-related behavior. For example, Simpson (1990) found that secure attachment style was associated with greater relationship interdependence, commitment, trust, and satisfaction among dating college students. Mikulincer and Nachson (1991) found that students with secure and anxious styles exhibit greater levels of self-disclosure than avoidant students. Kobak and Hazan (1991) found that spouses with secure working models—that is, expectations that partners are psychologically available and ready to be relied upon—deal with their emotional conflicts in more constructive ways and report better marital adjustment.

Simpson, Rholes, and Phillips (1996) videotaped dating couples as they tried to resolve a major problem in their relationship. They found that participants who were classified as anxious with respect to attachment style tended to perceive their dating partners in especially negative terms after discussing the major relational problem. Anxious men and women found the activity of discussing problems in their relationships to be especially stressful, and they reacted to the stress by lowering their estimation of their partners’ worth. In a related study, Simpson, Rholes, and Neligan (1992) videotaped dating couples as they sat in a waiting room before participating in an activity known to provoke anxiety in most people. The researchers coded behaviors such as physical contact, supportive comments, and efforts to seek and give emotional support. They found that those men and women classified as avoidant in attachment tended to express significantly less helping and support behavior with their partners compared with those who had secure attachment styles. In times of anxiety, people with secure attachment styles are more active and effective in providing their romantic partners with a secure base of comfort, encouragement, and support, compared with people who have avoidant styles of attachment.

For both infants and adults, the provision of support is a key function of secure attachment. Securely attached infants experience more secure support in their environments, and adults with secure attachment styles should be especially effective in supporting others when they are in danger and in seeking and finding support for themselves in times of personal stress. Mikulincer, Florian, and Weller (1993) examined reactions to the stress of war by analyzing relations between attachment style and the ways in which Israeli citizens reacted to the Iraqi missile attack in the 1991 Persian Gulf War. A total of 140 Israeli students were interviewed 2 weeks after the war and classified according to their attachment styles (secure, avoidant, anxious) and residence area (dangerous vs. less dangerous area). Among students living in dangerous areas during the war (areas directly threatened by missile attack), those with secure attachment styles tended to engage in more support-seeking behavior as a way of coping with trauma, compared with avoidant and anxious students. In addition, anxious students in high-danger zones reported the highest levels of distress following the war while avoidant students reported the highest levels of hostility and physical symptoms in response to the war.

Research also suggests that attachment styles predict everyday social behavior. Tidwell, Reis, and Shaver (1996) asked 125 college students to keep behavioral diaries for a week. In the diaries, the students recorded their social interactions with friends, teachers, family members, acquaintances, romantic partners, and so on. The findings indicated that compared with anxious and secure individuals, students with avoidant attachment styles reported lower levels of intimacy, enjoyment, and positive emotions and higher levels of negative emotions in daily interactions, especially interactions with the opposite sex. Avoidant persons tend to structure their interactions in ways that minimize emotional closeness. Compared with avoidant and secure individuals, students with anxious attachment styles tended to report a wider variety of emotional experiences in their daily social interactions, reporting many emotional highs and lows in their interactions with others.

Overall, then, avoidant individuals experience low levels of joy and happiness in the presence of...
others and, perhaps as a result, tend to keep people at a distance. Anxious/ambivalent individuals experience a rich mixture of both positive and negative interpersonal events, perhaps contributing to their mixed or conflicted working models for attachment. Secure individuals report the highest levels of positive and lowest levels of negative interactions with other people in daily social life. In a similar study, Davilla and Sargent (2003) found that students with insecure attachment styles tend to perceive greater levels of interpersonal loss in daily events compared to students with secure attachments.

Outside the realm of interpersonal relationships, attachment styles appear to be implicated in the ways in which people understand themselves as individuals and how they make sense of their lives in the past, present, and anticipated future. Individuals with secure attachment styles tend to construct a more complex and coherent image of themselves compared with avoidant and anxious persons, and secure and avoidant people have generally more positive views of themselves and their lives compared with anxious individuals (Mikulincer, 1995). People with secure attachment styles describe themselves as more curious and exploratory, compared with avoidant and anxious individuals, and they hold more positive attitudes about being open-minded and curious (Mikulincer, 1997). Both anxious/ambivalent and avoidant attachment styles are associated with low levels of self-esteem and with higher levels of depression (Roberts, Gotlib, & Kassel, 1996).

In an important theoretical synthesis, Mario Mikulincer and Phillip Shaver (2007) have developed an integrative model of adult attachment that brings together many of the different findings and ideas that have arisen in this important research area during the past 20 years. Picking up where John Bowlby and Mary Ainsworth (Chapter 2 in this volume) left off, Mikulincer and Shaver point out that as the human being develops from infancy and childhood into the adolescent and adult years, attachment becomes less about overt proximity-seeking and more about the mental representations, or working models, that people construct regarding the most important relationships in their lives. Like the infant and the caregiver, lovers wish to be in close physical proximity with each other. But the lion’s share of the dynamics between lovers—and with respect to other important interpersonal relationships in life—lies in the minds of the people involved. What does my lover really think of me? How do I feel about him or her? When I am in need, can I count on those people who are closest to me? Will I be betrayed in the end? Can I really trust my closest friends?

Mental representations about attachment are stored in long-term associative memory (Mikulincer & Shaver, 2007). Included within these representations are “autobiographical, episodic memories (concrete moments of specific interactions with attachment figures), beliefs and attitudes concerning oneself and relationship partners, generic declarative knowledge about attachment relationships and interactions (e.g., the belief that romantic love as portrayed in the movies does not exist in real life), and procedural knowledge about how to regulate emotions and behave effectively in close relationships” (Mikulincer & Shaver, 2007, p. 23). The episodes, beliefs, attitudes, and strategies that comprise our working models of attachment may be activated in a wide range of interpersonal situations. But especially important are situations of danger, as when adults face, or perceive that they face, separation, loss, new obstacles or challenges in life, or threats to self-esteem. During these difficult moments, people “look” (both literally and figuratively) to their attachment figures for protection, support, and encouragement. The specific ways in which other people respond to our needs at the time we experience them surely influence how we manage to adapt to threats and challenges. But Mikulincer and Shaver (2007) add that the mental representations we have of attachment relationships, built up over the course of a lifetime, have a strong influence on how we adapt, too, even when we are unable to experience proximity with any attachment figure. In other words, even when we are by ourselves, facing challenges alone, our internalized working models of attachment help us to cope with stress and to regulate our emotions.

According to Mikulincer and Shaver (2007), attachment relationships in adulthood—both as they play themselves out in actual behavior and as they unfold with respect to the internal representations of attachment we hold in our minds—reprise many of the dynamics observed in the caregiver–infant bond. Figure 8.6 illustrates these dynamics in three phases or modules.
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FIGURE 8.6  A MODEL OF ADULT ATTACHMENT

FIRST MODULE

 Signs of threat?
  Yes
   Activation of the attachment system
   Seeking proximity to external or internalized attachment figure

 Continue with ongoing activities

SECOND MODULE

 Is the attachment figure available, attentive, responsive, etc.?
  Yes
   Felt security, relief, positive affect
   Broaden-and-build cycle of attachment security

  No
   Attachment insecurity (compounding of distress)

THIRD MODULE

 Is proximity seeking a viable option?
  Yes
   Hyperactivating strategies
   Hypervigilance regarding threat- and attachment-related cues

  No
   Deactivating strategies
   Distancing of threat-and-attachment-related cues
Attachment dynamics begin in the top left-hand corner of Figure 8.6. As the first module illustrates, if there is no threat, then the individual continues with ongoing activities. But if stress is perceived, then the attachment system is automatically activated, and the individual who faces threat seeks the comfort and security that may be afforded through attaining proximity to an attachment figure in life or through the activation of an internalized mental representation. Thus, when I face danger, I look for help from others and from what I have stored in my mind regarding how I have been helped and comforted in the past. In the second module of Figure 8.6, the person determines whether or not comfort can be obtained from the attachment figure or the mental representation of attachment. If the answer is yes, then the individual experiences security, relief, and positive emotion, which in turn reinforce his or her overall sense of security in the world. Positive attachment experiences like these “broaden and build” a healthy and adaptive sense of self (Fredrickson, 2001), which attachment theorists tend to associate with the secure attachment style of adulthood.

If, however, security and comfort are not forthcoming, then the insecure individual needs to decide what to do and where to go in order to deal with the threat. As illustrated in the third module of Figure 8.6, the individual has two choices, based on the perceived likelihood of receiving assistance from others. If the perceived likelihood is judged to be high, then the individual may engage in what Mikulincer and Shaver (2007) call hyperactivating strategies: The “main goal of hyperactivating strategies is to get an attachment figure, perceived as unreliable or insufficiently responsive, to pay more attention and provide protection or support” (p. 40). Therefore, the individual may present himself or herself to others as especially needy and dependent. The message is this: “Please help me; I am so vulnerable; I desperately desire your care.” Hyperactivating strategies may have the unintended effect of making people even more insecure over time, especially if their bids for attention lead to disappointment. As Figure 8.6 illustrates, hyperactivating strategies may lead to more wariness and vigilance regarding future threats, making it more likely that the individual will perceive more threats down the road, which in turn will activate the attachment systems (first module in Figure 8.6) and start the cycle all over again. According to Mikulincer and Shaver (2007), hyperactivating strategies and the dynamics that follow epitomize the anxious/ambivalent attachment style in adulthood.

As the third module in Figure 8.6 also illustrates, when the individual decides that further proximity seeking is not a viable option, then he or she may engage in what Mikulincer and Shaver (2007) term deactivating strategies. These are strategies designed to avoid potential attachment figures and to avoid the threats to the self that call for the activation of attachment behaviors. Deactivating strategies create distance between the self and others. They reinforce a compulsively self-reliant approach to life. The message is this: “I do not need you so much; I can handle life’s challenges on my own.” Deactivating strategies characterize the interpersonal orientation adopted by individuals with avoidant attachment styles. Avoidant people keep their distance from their attachment objects. Even in long-term love relationships, they may feel that they cannot completely rely on the other person in times of need. As a response to insecurity, they cultivate a self-reliant approach to life. Mikulincer and Shaver argue that the self-reliance
exhibited by avoidant individuals may have a defensive quality to it. A considerable body of empirical research suggests that the avoidant attachment style is associated with lower levels of self-insight and feeling that one’s own inflated sense of self is fundamentally unrealistic and inauthentic (Mikulincer & Shaver, 2007).

It should be clear by now that attachment styles in adulthood say as much about how we see ourselves as they do about our mental representations of others. The secure attachment style invokes a sense of self as comfortably engaged with others in the world, secure in knowing that others will love me and help me when I need them, and that I will do the same for them. This kind of implicit knowledge of self and other may be expressed in many ways, including through our dreams.

Consider the following dream, from a young woman with a secure attachment style:

I was sitting in my elementary-school library reading a book, and it seemed very natural [to be there] even though I haven’t been there for years. I spoke with friends and teachers, and the place was just as it used to be (low ceiling and shelves full of kids’ books, books that I read as a child). The principal came in and started yelling at us, saying we were barbaric children. I thought at first we might have been noisy and deserved this rebuke, but I immediately told him that, despite whatever bad behavior we engaged in, we didn’t deserve such treatment and he had overlooked my many good qualities. I felt that despite being a little girl, I had enough self-esteem and self-respect to tell him he was wrong. So I got up and told him I was not a barbarian and I came to the library to read books I like. He then apologized. I felt very proud of myself. At that instant, my mom appeared, hugged me, and said I was okay and she was very proud of me. (I don’t know how my mom got there.) She then took me to some fun place; I don’t know where. I just remember we laughed a lot and bought some silly things—maybe in a mall. (Mikulincer & Shaver, 2007, p. 151)

Reprising the attachment dynamics of infancy, the dream’s protagonist faces a threat—the harsh criticism delivered by the school principal. But she stands up to the threat, secure in her mental representation of an autonomous and effective self. Symbolizing how that sense of self is built upon the secure base of attachment, the protagonist’s mother appears in the scene to hug her and to take her out for a fun day. The dream illustrates that secure attachment is not about being clingy and dependent. On the contrary, the secure style frees the protagonist up to act in an assertive and prosocial fashion, even standing up for the unjustly chastised children. According to Mikulincer and Shaver (2007), securely attached individuals eventually identify with their attachment objects, internalizing the comforting and soothing qualities they experienced in the other. The secure attachment style, therefore, enables a person to be a secure base and safe haven for others. Research supports this claim. Recent studies show that secure individuals tend to express more compassionate feelings and values toward others and engage in greater levels of altruistic behavior, compared to individuals with anxious and avoidant attachment styles (Mikulincer & Shaver, 2005, 2007).

Consider now a dream reported by a young man with an anxious/ambivalent attachment style:

I am arguing with friends about who teaches a particular course. While arguing, I start running toward the city and see a bank robbery in progress. Suddenly I realize that I am the bank robber! I’m debating with myself about whether I should break into the bank or not, and I decide that I should. I get into the bank and yell, “Give me the money!” The teller stoops down below the counter, gets the money, and hands it to me, and I run away. While exiting the bank, I shoot three times in the air, and then run down the street with the weapon wrapped in a quilt. While running, I suddenly think about what I’ve done and what a bad person I am: “Maybe I hit someone while shooting in the air.” I’m debating with myself about where to run and I suddenly notice that the money has disappeared. I think, “Why can’t I do something right for once in my life?” I want to cry. Suddenly, the cops arrive to take me to jail. I say, “Take me. Maybe it’s for the best that I go to jail. No one actually cares about me anyhow.” I feel really ashamed of what I did. Suddenly my dad appears and yells at me: “How dare you do such a foolish thing! You deserve to go to jail. You’re worthless.” It hurts, and I know that what he says is true. (Mikulincer & Shaver, 2007, p. 154)

There is nothing subtle in this dream—full, as it is, of anxiety and self-condemnation. As an attachment figure, the father is punitive and cold. He holds a very negative image of the dream’s
protagonist, saying that he is ashamed of his son and writing him off as “worthless.” The protagonist’s view of himself mirrors his father’s view. I am indeed worthless. I cannot do anything right. The dream’s images and plot reflect what Mikulincer and Shaver (2007) see to be the psychological dynamics of anxious attachment. In the anxious attachment style, the individual desperately wants to receive protection, support, care, and affirmation from attachment figures. But attachment figures do not provide these things, or they provide them in an inconsistent and unreliable manner. The person becomes more and more insecure, as the world comes to appear more and more dangerous. Anxious attachment stunts the growth of an autonomous and fully functioning self. The anxious person’s doomed efforts to engage others through hyperactivating strategies only serve to reinforce a mental representation of the self as a weak, dependent, and failing individual.

Finally, let us consider a dream from a young woman with an avoidant attachment style:

I’m at home, hearing my mom talking on the phone. Suddenly, I realize she is talking with someone and making all kinds of arrangements for me that I had intended to make myself. I’m irritated and tell her to quit intruding: “I don’t deserve it, and I need more privacy and space at home.” I tell her she doesn’t understand me or know me and should leave me alone. “I’m strong enough to be on my own and make decisions for myself.” I go to a different room to get away from her, and suddenly I’m in some kind of military unit. I’m in a wooden barracks, looking around, and suddenly men in uniform arrive. One is looking at me angrily, wondering why I’m not saluting him. I don’t have a clue who he is, and I think he has a lot of gall expecting me to salute him. He continues to tell me all kinds of things, presumably about my life. I ask him to stop talking, because it’s all bullshit. I’m angry about what he says, and I leave the room. I touch my hair and find that it is full of metal wires braided into it. I start pulling them out of my hair, but there are more and more. (Mikulincer & Shaver, 2007, p. 155)

The dream’s protagonist is repeatedly annoyed by the efforts of others to intervene in her life. She wants to be left alone. She moves from one room to another to avoid her mother. She leaves the barracks when the military officer insists on talking about her life. Her prickliness is symbolized by the wire spikes growing out of her head. Accordingly, individuals with the avoidant attachment style do not believe that their attachment figures can provide them with the protection, care, support, and encouragement they need. As a result, they engage in a wide range of deactivating strategies, designed to distance themselves from others. Over time, furthermore, they build up a mental representation of themselves that mirrors their implicit sense of others. Mental representations of “them” and mental representations of “me” end up sharing the same core features: They are not there for me, so I won’t be there for them. And anyway, I do not need them.

**Summary**

1. Social-cognitive approaches to personality psychology focus on the mental representations that people form to process information about the self, other people, and social behavior. Social-cognitive adaptations are the characteristic personal constructs, cognitive styles, beliefs, expectancies, attributions, self-conceptions, and the like that people draw upon in their efforts to meet the many demands of social life. Along with personal goals, social-cognitive adaptations help to regulate social behavior. Like motives and goals, furthermore, social-cognitive adaptations go beyond general personality traits to specify some of the contingent and contextualized details of psychological individuality.

2. Developed in the 1950s, George Kelly’s theory of personal constructs foreshadowed many of the central themes of contemporary social-cognitive theory. Kelly viewed the person as akin to a scientist, seeking to categorize and make sense of his or her environment in order to predict and control it. According to Kelly, people develop personal constructs based on their perceptions of social events, and these constructs help to guide subsequent social behavior. A personal construct is a characteristic way of construing how some things are alike and some things are different from one another. Constructs differ from one another in terms of such dimensions as permeability and range of convenience. People differ
from one another with respect to the content and organization of their construct systems.

3. Cognitive styles refer to individual differences in people’s characteristic and typically preferred modes of processing information. One of the most well-researched cognitive styles is field independence-dependence. Highly field-independent people process perceptual information in an especially analytical and differentiated style, whereas highly field-dependent people process perceptual information in a more global and contextual style. Individual differences in field independence-dependence have been linked to a wide range of cognitive, social, and behavioral outcomes.

4. A second well-researched cognitive style is integrative complexity. Whereas field independence-dependence concerns differences in perception of stimuli, integrative complexity refers to styles of reasoning. Integratively complex individuals reason about issues in a highly differentiated manner, contrasting many distinctions and nuances and taking into consideration multiple points of view. By contrast, integratively less complex or simple individuals see fewer distinctions and nuances and tend to rely instead on a handful of broad principles or categories. Integrative complexity appears to wax and wane as a function of age and situations. Nonetheless, individual differences in overall integrative complexity can be assessed. People high in integrative complexity tend to make more well-informed and well-balanced evaluations of complex issues, are more open-minded and tolerant, and show considerable cognitive self-direction, but they also may sometimes encounter more difficulty in making clear-cut decisions based on moral principles, compared with individuals low in integrative complexity.

5. Social-cognitive perspectives on personality view the person as a planful and more-or-less effective agent in the social world who is able to respond in flexible ways to a wide range of social situations. The person’s social effectiveness is largely determined by what Cantor and Kihlstrom call social intelligence. Social intelligence consists of the characteristic concepts, episodes, and rules that a person draws on to solve social problems in everyday life.

6. Perhaps the most salient components of declarative-semantic social knowledge are self-schemas, or knowledge structures about the self. Each person builds up conceptions of the self—self-schemas—that structure the processing of self-relevant information and guide behavior. People process information that is relevant to their self-schemas in highly efficient ways. Contemporary social-cognitive views tend to emphasize the multiplicity of self-schemas. People may have many different images of themselves, including possible selves. Possible selves represent an individual’s ideas of what he or she might become or what he or she fears becoming. Possible selves are cognitive vehicles for carrying a person’s most important motives, desires, hopes, dreams, and fears. Research on possible selves of “what might have been” in life shows that feelings of happiness and positive emotion are associated with people’s ability to let go of those lost possible selves that once held so much positive emotion for them. At the same time, psychological maturity is associated with the ability to think through the many nuances of lost possible selves and to imagine in vivid detail what might have happened in life had things turned out a different way.

7. Self-knowledge can be further broken down into actual, ideal, and ought selves. Ideal selves incorporate attributes that a person strongly desires to possess, whereas ought selves contain attributes that a person believes he or she should possess. Ideal selves connect to a promotion focus in life, sensitivity toward positive outcomes, and approach strategies in social interaction. Ought selves connect to a prevention focus, sensitivity toward negative outcomes, and avoidance strategies in social behavior. People often experience discrepancies between different selves. Large discrepancies between actual and ideal selves have been associated with depression, whereas large discrepancies between a person’s actual and ought selves have been linked to anxiety.

8. Social-cognitive theories have proven especially useful in understanding depression. While some approaches have focused on depressive schemata, others have examined the attributional or explanatory style that depressed people employ to make sense of good and bad events in life. Research suggests that depression is associated with a pessimistic explanatory style, whereas people attribute the causes of negative events to internal, stable, and global factors. This style of explaining negative social events may lead to self-blame and feelings of hopelessness and helplessness. Pessimistic explanatory styles are
also associated with poor school performance, poor work performance, poor performance in athletics, poor health, and even untimely death.

9. Social-cognitive adaptations include values and virtues that people hold up to be especially important in their lives. For Americans, religious values have a special psychological resonance. Strong religious beliefs and values, as well as involvement in religious behaviors, tends to be associated, among Americans, with many features of physical and mental health. The recent movement toward positive psychology has stimulated research on human virtues and character strengths. One approach enumerates 24 different virtues and character strengths, divided into the six domains of wisdom and knowledge, courage, humanity, justice, temperance, and transcendence. Among the most researched virtues in this list is gratitude. Some psychologists view gratitude to be the “parent” of all virtues, arguing that a thankful and gracious approach to life opens the door to many other positive human expressions. Research suggests that gratitude is positively associated with psychological well-being and prosocial behavior.

10. Among the most powerful and emotionally laden social-cognitive adaptations in personality are people’s representations of attachment figures. Building on insights regarding caregiver–infant attachment (Chapter 2), psychologists have developed theories and methods to assess individual differences in adult attachment styles. People with secure attachment styles have developed mental representations of loved others and of the self that underscore the core features of security, autonomy, and comfortableness in the face of threat. Secure attachment style is positively associated with self-coherence, intimacy and reciprocity in love relationships, and a compassionate approach to the world. People with anxious/ambivalent attachment styles, by contrast, engage in a range of hyperactivating strategies, such as dependency and clinging, designed to increase proximity to others. Their strategies often end up, however, increasing their insecurity in the world and making them more sensitive to perceived threats and danger. People with avoidant attachment styles engage in deactivating strategies, designed to distance themselves from others. Avoidant attachment is associated with a shallow and defensive sense of self-reliance. Research on attachment styles shows that people’s most important mental representations of others can come to resemble their most important mental representations of the self.