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## Unit IV

### THE HUMANISTIC, BEHAVIORAL AND COGNITIVE APPROACHES.

#### **Humanistic : Abraham Maslow**

Personality Development: The Hierarchy of Needs hierarchy of needs hierarchy of needs An arrangement of innate needs, from strongest to weakest, that activates and directs behavior. An arrangement of innate needs, from strongest to weakest, that activates and directs behavior. instinctoid needs instinctoid needs Maslow's term for the innate needs in his needs-hierarchy theory. Maslow's term for the innate needs in his needs-hierarchy theory. Figure 9.1 Maslow's hierarchy of needs Maslow proposed a hierarchy of five innate needs that activate and direct human behavior (Maslow, 1968, 1970b). They are the physiological, safety, belongingness and love, esteem, and self-actualization needs (see Figure 9.1). Maslow described these needs as instinctoid, by which he meant that they have a hereditary component. However, these needs can be affected or overridden by learning, social expectations, and fear of disapproval. Although we come equipped with these needs at birth, the behaviors we use to satisfy them are learned and therefore subject to variation from one person to another. The needs are arranged in order from strongest to weakest. Lower needs must be at least partially satisfied before higher needs become influential. But . For example, hungry people feel no urge to satisfy the higher need for esteem. They are preoccupied with satisfying the physiological need for food, not with obtaining approval and esteem from other people. It is only when people have adequate food and shelter and when the rest of the lower needs are satisfied that they are motivated by needs that rank higher in the hierarchy. Thus, we are not driven by all the needs at the same time. In general, only one need will dominate our personality. Which one it will be depends on which of the others have been satisfied. People who are successful in their careers are no longer driven by, or even aware of, their physiological and safety needs. These needs have been amply taken care of. Successful people are more likely to be motivated by the needs for esteem or self-actualization. However, Maslow

suggested that the order of the needs can be changed. If an economic recession causes some people to lose their jobs, the safety and physiological needs may reassume priority. Being able to pay the mortgage becomes more prized than popularity with colleagues or an award from a civic organization.

**Physiological needs: food, water, and sex.**

**Safety needs: security, order, and stability**

**Belongingness and love needs**

**Esteem needs (from self and others)**

**Need for selfactualization**

**Maslow described several characteristics of needs.**

- The lower the need is in the hierarchy, the greater are its strength, potency, and priority. The higher needs are weaker needs.

- Higher needs appear later in life. Physiological and safety needs arise in infancy. Belongingness and esteem needs arise in adolescence. The need for self-actualization does not arise until midlife.

Deficit (deficiency) needs The lower needs; failure to satisfy them produces a deficiency in the body. The lower needs; failure to satisfy them produces a deficiency in the body.

Growth (being) needs The higher needs; The higher needs; although growth needs are less necessary than deficit needs for survival, they involve the realization and fulfillment of human potential.

Although growth needs are less necessary than deficit needs for survival, they involve the realization and fulfillment of human potential.

- Because higher needs are less necessary for actual survival, their gratification can be postponed. Failure to satisfy a higher need does not produce a crisis. Failure to satisfy a lower need does produce a crisis. For this reason, Maslow called lower needs deficit, or deficiency, needs; failure to satisfy them produces a deficit or lack in the individual.

- Although higher needs are less necessary for survival, they contribute to survival and growth. Satisfaction of higher needs leads to improved health and longevity. For this reason, Maslow called higher needs growth, or being, needs.
- Satisfaction of higher needs is also beneficial psychologically. Satisfaction of higher needs leads to contentment, happiness, and fulfillment.
- Gratification of higher needs requires better external circumstances (social, economic, and political) than does gratification of lower needs. For example, pursuing self-actualization requires greater freedom of expression and opportunity than pursuing safety needs.
- A need does not have to be satisfied fully before the next need in the hierarchy becomes important. Maslow proposed a declining percentage of satisfaction for each need. Offering a hypothetical example, he described a person who satisfied, in turn, 85 percent of the physiological needs, 70 percent of the safety needs, 50 percent of the belongingness and love needs, 40 percent of the esteem needs, and 10 percent of the self-actualization need.

### **Physiological Needs**

If you have ever been swimming and had to struggle for air while under water, or if you have gone too long without eating, you may have realized how trivial the needs for love or esteem or anything else can be when your body is experiencing a physiological deficiency. As we noted, a starving person craves only food. But once that need is satisfied, the person is no longer driven by it. The need ceases to direct or control behavior. This describes the situation for most people in an affluent, industrialized culture. It is rare for middle-class Americans to be concerned with satisfying their survival needs. Physiological needs have a greater personal impact as motivating forces in cultures where basic survival remains an everyday concern. Because a need that has been gratified no longer serves to motivate behavior, the physiological needs play a minimal role for most of us.

### **Safety Needs**

Maslow believed that the needs for safety and security typically are important drives for infants and neurotic adults. Emotionally healthy adults have usually satisfied their safety needs, a condition that requires stability, security, and freedom from fear and anxiety. For infants and children, the safety needs can be seen clearly in their behavior because youngsters react visibly and immediately to any threat to their security. Adults have learned ways to inhibit their reactions to dangerous situations. Another visible indication of children's safety needs is their preference for a structure or routine, for an orderly and predictable world. Too much freedom and permissiveness leads to an absence of structure and order. This situation is likely to produce anxiety and insecurity in children because it threatens their security. Some measure of freedom must be granted to children, but only within the limits of their capacity to cope. This freedom must be offered with guidance because children are not yet capable of directing their own behavior and realizing the consequences. Neurotic and insecure adults also need structure and order because their safety needs still dominate their personality. Neurotics compulsively avoid new experiences. They arrange their world to make it predictable, budgeting their time and organizing their possessions. Pencils must be kept in a certain drawer, and shirts hung in the closet facing the same direction. Maslow pointed out that although most normal adults have satisfied the safety needs, those needs may still have an impact on behavior. Many of us choose the predictable over the unknown; we prefer order to chaos. That is why we save for the future, buy insurance, and opt to remain in a secure job rather than risk a new venture. However, the safety needs are not as overwhelming a driving force for normal adults as they are for children or neurotics.

### **Belongingness and Love Needs**

Once our physiological and safety needs have been reasonably well satisfied, we attend to the needs for belongingness and love. These needs can be expressed through a close relationship with a friend, lover, or mate, or through social relationships formed within a group. The need to belong has grown more difficult to satisfy in our increasingly mobile society. Few of us live in the neighborhood where we grew up and keep friends from our early schooldays. We change schools, jobs, and communities too frequently to put down roots, to develop a secure sense of belonging. Many of us attempt to satisfy the need to belong in other ways, such as joining a church, club, or Internet chat room,

enrolling in a class, or volunteering for a service organization. The need to give and receive love can be satisfied in an intimate relationship with another person. Maslow did not equate love with sex, which is a physiological need, but he recognized that sex is one way of expressing the love need. He suggested that the failure to satisfy the need for love is a fundamental cause of emotional maladjustment.

### **Esteem Needs**

Once we feel loved and have a sense of belonging, we may find ourselves driven by two forms of the need for esteem. We require esteem and respect from ourselves, in the form of feelings of self-worth, and from other people, in the form of status, recognition, or social success. Satisfaction of the need for self-esteem allows us to feel confident of our strength, worth, and adequacy, which will help us become more competent and productive in all aspects of our life. When we lack self-esteem, we feel inferior, helpless, and discouraged with little confidence in our ability to cope.

### **The self-Actualization needs**

The highest need in Maslow's hierarchy, self-actualization, depends on the maximum realization and fulfillment of our potentials, talents, and abilities. Although a person may satisfy all the other needs in the hierarchy, if that person is not self-actualizing, he or she will be restless, frustrated, and discontent. Maslow wrote, "A musician must make music, an artist must paint, a poet must write . . . to be ultimately at peace" (1970b, p. 46). The self-actualizing process may take many forms, but each person, regardless of occupation or interests, is capable of maximizing personal abilities and reaching the fullest personality development. Self-actualization is not limited to creative and intellectual superstars such as musicians, artists, and astrophysicists. What is important is to fulfill one's own potentials at the highest level possible, whatever one's chosen endeavor. Maslow put it this way, "A first-rate soup is more creative than a second-rate painting . . . cooking or parenthood or making a home could be creative, while poetry need not be" (1987, p. 159).

The following conditions are necessary in order for us to satisfy the self-actualization need:

- We must be free of constraints imposed by society and by ourselves.
- We must not be distracted by the lower-order needs.
- We must be secure in our self-image and in our relationships with other people; we must be able to love and be loved in return.
- We must have a realistic knowledge of our strengths and weaknesses, virtues and vices.

Although the hierarchy of needs Maslow proposed applies to most of us, there can be exceptions. Some people dedicate their lives to an ideal and willingly sacrifice everything for their cause. People have been known to fast until death in the service of their beliefs, thus denying their physiological and safety needs. Religious figures may abandon worldly goods to fulfill a vow of poverty, thus satisfying the self-actualization need while frustrating the lower-order needs. Artists throughout history have imperiled health and security for the sake of their work. A more common reversal in the hierarchy occurs when people place a greater importance on esteem than on love, believing that the belongingness and love needs can be satisfied only if they first feel self-confident.

### **Cognitive needs**

Maslow also proposed a second set of innate needs, the cognitive needs—to know and to understand, which exist outside the hierarchy we have described. The need to know is stronger than the need to understand. Thus, the need to know must be at least partially satisfied before the need to understand can emerge. Several points of evidence support the existence of cognitive needs (Maslow, 1970b).

- Laboratory studies show that animals explore and manipulate their environment for no apparent reason other than curiosity, that is, a desire to know and to understand.
- Historical evidence shows that people often have sought knowledge at the risk of their lives, thus placing the needs to know and to understand above the safety needs.

- Studies suggest that emotionally healthy adults are attracted to mysterious and unexplained events and are motivated to improve their knowledge about them.
- Emotionally healthy adults in Maslow's own clinical practice complained of boredom and a lack of zest and excitement in life. He described them as "intelligent people leading stupid lives in stupid jobs" and found that they improved when they took steps to fulfill the needs to know and to understand by becoming involved in more challenging activities.

The needs to know and to understand appear in late infancy and early childhood and are expressed by children as a natural curiosity. Because the needs are innate, they do not have to be taught, but the actions of parents and teachers can serve to inhibit a child's spontaneous curiosity. Failure to satisfy the cognitive needs is harmful and hampers the full development and functioning of the personality. The hierarchy of these two needs overlaps the original five-need hierarchy. Knowing and understanding—essentially, finding meaning in our environment—are basic to interacting with that environment in an emotionally healthy, mature way to satisfy physiological, safety, love, esteem, and self-actualization needs. It is impossible to become self-actualizing if we fail to meet the needs to know and to understand.

### **The study of Self Actualizers**

According to Maslow's theory, self-actualizing persons differ from others in terms of their basic motivation. Maslow proposed a distinct type of motivation for self-actualizers called metamotivation (sometimes called B-motivation or Being). The prefix meta- means after or beyond. Metamotivation, then, indicates that it goes beyond psychology's traditional idea of motivation. Metamotivation implies a condition in which motivation as we know it plays no role. Self-actualizing persons are not motivated to strive for a particular goal. Instead, they are said to be developing from within. Maslow described the motivation of people who are not self-actualizers as a condition of D-motivation or Deficiency. D-motivation involves striving for something specific to make up for something that is lacking within us. For example, failure to eat produces a deficiency in the body that we feel as discomfort. This feeling motivates us to take some action to reduce the resulting tension. Thus, a specific physiological need (hunger) that requires a specific goal object (food)

produces a motivation to act to attain something we lack (we search for food). Maslow's writings about the development of B-motivation and D-motivation are incomplete, but apparently D-motivation applies not only to physiological needs, as in the example above, but also to the needs for safety, belongingness and love, and esteem (Maslow, 1971). In contrast, self-actualizing persons are concerned with fulfilling their potential and with knowing and understanding their environment. In their state of metamotivation, they are not seeking to reduce tension, satisfy a deficiency, or strive for a specific object. Their goal is to enrich their lives by acting to increase tension to experience a variety of stimulating and challenging events. Because their lower-order deficiency needs have been met, self-actualizers function at a level beyond striving for specific goal objects to satisfy a deficit. Thus, they are in a state of "being," spontaneously, naturally, and joyfully expressing their full humanity. Having explained that self-actualizers are thus, in a sense, unmotivated, Maslow proposed a list of metaneeds toward which self-actualizers evolve (see Table 9.1). Metaneeds are states of being—such as goodness, uniqueness, and perfection—rather than specific goal objects. Failure to satisfy metaneeds is harmful and produces a kind of metapathology, which thwarts the full development of the personality. Metapathology prevents self-actualizers from expressing, using, and fulfilling their potential. They may come to feel helpless and depressed, unable to pinpoint a source for these feelings or identify a goal that might alleviate the distress. Characteristics of Self-Actualizers Maslow's research on emotionally healthy people formed the basis of his personality theory (Maslow, 1970b, 1971). He did not find many examples of self-actualizers; he estimated that they constitute 1 percent or less of the population.

- An efficient perception of reality. Self-actualizers perceive their world, including other people, clearly and objectively, unbiased by prejudgments or preconceptions.
- An acceptance of themselves, others, and nature. Self-actualizers accept their strengths and weaknesses. They do not try to distort or falsify their self-image and they do not feel guilty about their failings. They also accept the weaknesses of other people and of society in general.
- A spontaneity, simplicity, and naturalness. The behavior of self-actualizers is open, direct, and natural. They rarely hide their feelings or emotions or play a



role to satisfy society, although they may do so to avoid hurting other people. Self-actualizers are individualistic in their ideas and ideals but not necessarily unconventional in their behavior. They feel secure enough to be themselves without being overly assertive.

- A focus on problems outside themselves. Self-actualizers have a sense of mission, a commitment, to which they devote their energy. This dedication to a cause or vocation is a requirement for self-actualization. Self-actualizers find pleasure and excitement in their hard work. Through their intense dedication, self-actualizers are able to satisfy the metaneeds. A writer or scientist may search for truth, an artist for beauty, an attorney for justice. Self-actualizers do not undertake their tasks for money, fame, or power but rather to satisfy the metaneeds. Their commitment challenges and develops their abilities and helps define their sense of self.

- A sense of detachment and the need for privacy. Self-actualizers can experience isolation without harmful effects and seem to need solitude more than persons who are not self-actualizing. Self-actualizers depend on themselves, not on others, for their satisfactions. This independence may make them seem aloof or unfriendly, but that is not their intent. They are simply more autonomous than most people and do not crave social support.

- A freshness of appreciation. Self-actualizers have the ability to perceive and experience their environment with freshness, wonder, and awe. An experience may grow stale for someone who is not self-actualizing, but self-actualizers will enjoy each recurrence as though it was the first. Whether it is a sunset, a painting, or a symphony, a baseball game or a birthday gift—all of these experiences can be viewed with delight. Self-actualizers appreciate what they have and take little for granted. peak experience peak experience A moment of intense ecstasy, similar to a religious or mystical experience, during which the self is transcended. A moment of intense ecstasy, similar to a religious or mystical experience, during which the self is transcended.

- Mystical or peak experiences. Self-actualizers know moments of intense ecstasy, not unlike deep religious experiences, that can occur with virtually any activity. Maslow called these events peak experiences, during which the self is transcended and the person feels supremely powerful, confident, and decisive. Maslow wrote that a peak experience involves

a feeling of great ecstasy and wonder and awe, the loss of placing in time and space with, finally, the conviction that something extremely important and valuable had happened, so that the subject is . . . transformed and strengthened” (Maslow, 1970b, p. 164).

Maslow noted differences among self-actualizers in the quantity and quality of their peak experiences. So-called peakers have more peak experiences than non-peakers, and the experiences of peakers tend to be more mystical and religious. Indeed, peakers may be described as more saintly and poetical than non-peakers. Non-peakers are more practical and more concerned with worldly affairs. Peakers have been identified among diverse occupational groups including artists, writers, scientists, business leaders, educators, and politicians. Maslow noted that it was possible for a person who is not self-actualizing occasionally to have a peak experience.

- **Social interest.** Maslow adopted Alfred Adler’s concept of social interest to indicate the sympathy and empathy self-actualizing persons have for all humanity. Although often irritated by the behavior of other people, self-actualizers feel a kinship with and an understanding of others as well as a desire to help them.

- **Profound interpersonal relations.** Although their circle of friends is not large, self-actualizers have deep, lasting friendships. They tend to select as friends those with personal qualities similar to their own, just as we all choose as friends the people we find compatible. Self-actualizers often attract admirers or disciples. These relationships are usually one-sided; the admirer asks more of the self-actualizer than the self-actualizer is able or willing to give.

- **A democratic character structure.** Self-actualizers are tolerant and accepting of the personality and behavior of others. They display no racial, religious, or social prejudice. They are willing to listen to and learn from anyone capable of teaching them and are rarely condescending.

- **Creativeness.** Self-actualizing people are highly creative and exhibit inventiveness and originality in their work and other facets of life. They are flexible, spontaneous, and willing to make mistakes and learn from them. They are open and humble, in the way children are before society teaches them to be embarrassed or shy about possibly doing something foolish.

■ Resistance to enculturation. Self-actualizers are autonomous, independent, and self-sufficient. They feel free to resist social and cultural pressures to think or behave in a certain way. They do not openly rebel against cultural norms or social codes, but they are governed by their own nature rather than the strictures of society.

This is quite an amazing set of attributes. According to Maslow's research, self-actualizers seem almost perfect. But they do have human flaws and imperfections. On occasion they can be rude, even ruthless, and they experience doubts, conflicts, and tension. Nevertheless, such incidents are rare and less intense than for the person who is not self-actualizing.

### **Failure to Become Self-Actualizing**

If the need for self-actualization is innate and therefore does not have to be taught and learned, then why isn't everyone self-actualizing? Why has less than 1 percent of the population reached this state of being? One reason is that the higher the need in Maslow's proposed hierarchy, the weaker it is. As the highest need, self-actualization is the least potent. Thus, it can easily be inhibited. For example, hostile or rejecting parents make it difficult for a person to satisfy love and esteem needs. In this case, the self-actualization need may not emerge. At a lower level, poor economic conditions can make it difficult to satisfy physiological and safety needs, so self-actualization assumes less importance. Inadequate education and improper child-rearing practices can thwart the drive for self-actualization in adulthood. Maslow cited the typical sex-role training for boys, who are taught to inhibit such qualities as tenderness and sentimentality. Thus, this aspect of their nature is not encouraged to fully develop. If children are overprotected and not permitted to try new behaviors, explore new ideas, or practice new skills, then they are likely to be inhibited as adults, unable to express themselves fully in activities vital to self-actualization. The opposite behavior—excessive parental permissiveness—can also be harmful. Too much freedom in childhood can lead to anxiety and insecurity, thus undermining the safety needs. To Maslow, the ideal situation in childhood is a balance of permissiveness and regulation. Sufficient love in childhood is a prerequisite for self-actualization, as well as satisfaction of physiological and safety needs within the first two years of life. If children feel secure and confident in the early years, they will remain so as adults. This position is similar to Erik Erikson's emphasis on the development of trust in early childhood and to Karen Horney's ideas on the childhood need for security.

Without adequate parental love, security, and esteem in childhood, it is difficult to strive for self-actualization in adulthood.

Another reason for the failure to self-actualize is what Maslow called the Jonah complex. This idea is based on the biblical tale of Jonah, described by Maslow as “called by God to prophesy, but [Jonah] was afraid of the task. He tried to run away from it. But no matter where Jonah ran, he could find no hiding place. Finally, he understood that he had to accept his fate” (quoted in Hoffman, 1996, p. 50). Thus, the Jonah complex refers to our doubts about our own abilities. We may fear that taking action to maximize our potential will lead to new situations with which we may be unable to cope. Simultaneously, we are afraid of and thrilled by the possibilities but too often the fear takes precedence. Self-actualization requires courage. Even when the lower needs have been satisfied, we cannot simply sit back and wait to be swept along some flower-strewn path to ecstasy and fulfillment. The self-actualizing process takes effort, discipline, and self-control. Thus, for many people, it may seem easier and safer to accept life as it is rather than seek new challenges. Self-actualizers will constantly test themselves by abandoning secure routines and familiar behaviors and attitudes.

### **Assessment in Maslow’s Theory**

Maslow’s work on self-actualization did not begin as a formal program of personality assessment and research. He started his investigation out of curiosity about two people who impressed him, the anthropologist Ruth Benedict and the Gestalt psychologist Max Wertheimer. Maslow admired them greatly and wanted to understand what made them so different from the other people he knew. After observing them carefully he concluded that they shared certain qualities that set them apart from the average individual. Maslow then attempted to assess these characteristics in other people. His first research subjects were college students, but he found only 1 out of 3,000 he could describe as self-actualizing. He decided that the characteristics for the self-actualizing personality, those qualities he had identified in Benedict and Wertheimer, were not developed in young people. His next step was to study middle-aged and older persons. However, even among this group Maslow found less than 1 percent of the population capable of meeting his criteria for self-actualization. The self-actualizers he finally identified included several dozen persons he designated as sure or probable cases, partial cases, or potential cases. Some

were Maslow's contemporaries. Others were historical figures such as Thomas Jefferson, Albert Einstein, George Washington Carver, Harriet Tubman, and Eleanor Roosevelt. Maslow used a variety of techniques to assess their personalities. For historical figures, he worked with biographical material, analyzing written records for similarities in personal characteristics. For the living subjects he relied on interviews, free association, and projective tests. He found that many of these people were self-conscious when questioned, so often he was forced to study them indirectly, although he did not explain precisely how this was done.

### **The Personal Orientation Inventory**

The Personal Orientation Inventory (POI), a self-report questionnaire consisting of 150 pairs of statements, was developed by psychologist Everett Shostrom to measure self-actualization (Shostrom, 1964, 1974). People taking the test must indicate which of each pair is more applicable to them (see Table 9.3). The POI is scored for two major scales and 10 subscales. The major scales are time competence, which measures the degree to which we live in the present, and inner directedness, which assesses how much we depend on ourselves rather than on others for judgments and values.

### **Carl Rogers :**

#### **The Self and the Tendency toward Actualization**

During his trip to China, Rogers came to recognize the importance of an autonomous self as a factor in his own development. His early research reinforced the importance of the self in the formation of the personality. In the 1930s, he developed a method for determining whether a child's behavior was healthy and constructive or unhealthy and destructive. He investigated the child's background and had the child rated on factors he believed would influence **behavior**. These factors included the family environment, health, intellectual development, economic circumstances, cultural influences, social

interactions, and level of education. All of these factors are external, that is, part of the child's environment. Rogers also investigated a potential internal influence, the child's self-understanding or self-insight. Rogers described self-insight as an acceptance of self and reality, and a sense of responsibility for the self. Approximately a decade later, William Kell, one of Rogers's students, adopted this evaluative approach in an attempt to predict the behavior of delinquent children. Rogers suggested that the factors of family environment and social interactions would correlate most strongly with delinquent behavior, but he was wrong. The factor that most accurately predicted later behavior was self-insight. Surprised to learn that family environment did not relate highly to later delinquent behavior, Rogers wrote, "I was simply not prepared to accept this finding, and the study was put on the shelf" (1987, p. 119). As we noted earlier, scientists sometimes reject data that do not agree with their views and expectations. Two years later, Helen McNeil replicated the study using a different group of research participants. She obtained similar results. One's level of self-insight was the single most important predictor of behavior. This time, faced with an accumulation of data, Rogers accepted the findings and, on reflection, came to appreciate their significance. If one's attitude toward the self were more important in predicting behavior than the external factors widely thought to be so influential in childhood, then counselors and social workers were emphasizing the wrong things in trying to treat delinquent children and adolescents! Counselors traditionally focus on external factors such as a poor family environment and alter the circumstances by removing children from a threatening home situation and placing them in foster care. Instead, they should be trying to modify the children's self-insight. That realization was important to Rogers personally. This experience helped me decide to focus my career on the development of a psychotherapy that would bring about greater awareness of self-understanding, self-direction, and personal responsibility, rather than focusing on changes in the social environment. It led me to place greater emphasis on the study of the self and how it changes. (Rogers, 1987, p. 119)

Thus, the self became the core of Rogers's theory of personality, as it had become the core of his own life. actualization tendency actualization tendency

The basic human The basic human motivation to actualize, maintain, and enhance the self. motivation to actualize, maintain, and enhance the self. Rogers believed people are motivated by an innate tendency to actualize, maintain, and enhance the self. This drive toward self-actualization is part of a larger actualization tendency, which encompasses all physiological and psychological

needs. By attending to basic requirements—such as the needs for food, water, and safety—the actualization tendency serves to maintain the organism, providing for sustenance and survival.

The actualization tendency begins in the womb, facilitating human growth by providing for the differentiation of the physical organs and the development of physiological functioning. It is responsible for maturation—the genetically determined development of the body's parts and processes—ranging from the growth of the fetus to the appearance of the secondary sex characteristics at puberty. These changes, programmed into our genetic makeup, are all brought to fruition by the actualization tendency. Even though such changes are genetically determined, progress toward full human development is neither automatic nor effortless. To Rogers, the process involved struggle and pain. For example, when children take their first steps they may fall and hurt themselves. Although it would be less painful to remain in the crawling stage, most children persist. They may fall again and cry, but they persevere despite the pain because the tendency to actualize is stronger than the urge to regress simply because the growth process is difficult.

organismic valuing process  
organismic valuing process

The process by which we judge experiences in terms of their value for fostering or hindering our actualization and growth. The process by which we judge experiences in terms of their value for fostering or hindering our actualization and growth. The governing process throughout the life span, as Rogers envisioned it, is the organismic valuing process. Through this process we evaluate all life experiences by how well they serve the actualization tendency. Experiences that we perceive as promoting actualization are evaluated as good and desirable; we assign them a positive value. Experiences perceived as hindering actualization are undesirable and thus earn a negative value. These perceptions influence behavior because we prefer to avoid undesirable experiences and repeat desirable experiences.

## **The Experiential World**

In developing his theory, Rogers weighed the impact of the experiential world in which we operate daily. This provides a frame of reference or context that influences our growth. We are exposed to countless sources of stimulation, some trivial and some important, some threatening and others rewarding. He

wanted to know how we perceive and react to this multifaceted world of experience. He answered the question by saying that the reality of our environment depends on our perception of it, which may not always coincide with reality. We may react to an experience far differently from the way our best friend does. You may judge the behavior of your roommate in a dramatically different way than does someone decades older. Our perceptions change with time and circumstances. Your own opinion of what you consider to be acceptable collegiate behavior will be different by the time you are 70. The notion that perception is subjective is an old one and not unique to Rogers. This idea, called phenomenology, argues that the only reality of which we can be sure is our own subjective world of experience, our inner perception of reality. The phenomenological approach within philosophy refers to an unbiased description of our conscious perception of the world, just as it occurs, without any attempt on our part at interpretation or analysis. In Rogers's view, the most important point about our world of experience is that it is private and thus can only be known completely to each of us.

As the actualization tendency in infancy leads us to grow and develop, our experiential world broadens. Infants are exposed to more and more sources of stimulation and respond to them as they are subjectively perceived. Our experiences become the only basis for our judgments and behaviors. Rogers wrote, "Experience is, for me, the highest authority. The touchstone of validity is my own experience" (1961, p. 23). Higher levels of development sharpen our experiential world and ultimately lead to the formation of the self.

### **The Development of the Self in Childhood**

As infants gradually develop a more complex experiential field from widening social encounters, one part of their experience becomes differentiated from the rest. This separate part, defined by the words I, me, and myself, is the self or self-concept. The formation of the self-concept involves distinguishing what is directly and immediately a part of the self from the people, objects, and events that are external to the self. The self-concept is also our image of what we are, what we should be, and what we would like to be. Ideally, the self is a consistent pattern, an organized whole. All aspects of the self strive for consistency. For example, people who are disturbed about having aggressive



feelings and choose to deny them dare not express any obvious aggressive behaviors. To do so would mean taking responsibility for actions that are inconsistent with their self-concept, because they believe they should not be aggressive.

**Positive Regard :** positive regard Acceptance, love, and approval from others. Acceptance, love, and approval from others. unconditional positive regard unconditional positive regard Approval granted Approval granted regardless of a person's behavior. In Rogers's person-centered therapy, the therapist offers the client unconditional positive regard. regardless of a person's behavior. In Rogers's person-centered therapy, the therapist offers the client unconditional positive regard. As the self emerges, infants develop a need for what Rogers called positive regard. This need is probably learned, although Rogers said the source was not important. The need for positive regard is universal and persistent. It includes acceptance, love, and approval from other people, most notably from the mother during infancy. Infants find it satisfying to receive positive regard and frustrating not to receive it or to have it withdrawn. Because positive regard is crucial to personality development, infant behavior is guided by the amount of affection and love bestowed. If the mother does not offer positive regard, then the infant's innate tendency toward actualization and development of the self-concept will be hampered. Infants perceive parental disapproval of their behavior as disapproval of their newly developing self. If this occurs frequently, infants will cease to strive for actualization and development. Instead, they will act in ways that will bring positive regard from others, even if these actions are inconsistent with their self-concept. Even though infants may receive sufficient acceptance, love, and approval, some Specific behaviors may bring punishment. However, if positive regard for the infant persists despite the infant's undesirable behaviors, the condition is called **unconditional positive regard**. By this, Rogers meant that the mother's love for the child is granted freely and fully; it is not conditional or dependent on the child's behavior.

An important aspect of the need for positive regard is its reciprocal nature. When people perceive themselves to be satisfying someone else's need for positive regard, they in turn experience satisfaction of that need themselves. Therefore, it is rewarding to satisfy someone else's need for positive regard. Because of the importance of satisfying the need for positive regard, particularly in infancy, we become sensitive to the attitudes and behaviors of other people.

By interpreting the feedback we receive from them (either approval or disapproval), we refine our self-concept. Thus, in forming the self-concept we internalize the attitudes of other people. In time, positive regard will come more from within us than from other people, a condition Rogers called **positive self-regard**. Positive self-regard becomes as strong as our need for positive regard from others, and it may be satisfied in the same way. For example, children who are rewarded with affection, approval, and love when they are happy will come to generate **positive self-regard** whenever they behave in a happy way. Thus, in a sense, we learn to reward ourselves. Positive self-regard, like positive regard, is reciprocal. When people receive positive regard and develop positive self-regard, in turn they may provide positive regard to others.

### **Conditions of worth :**

Conditions of worth evolve from this developmental sequence of positive regard leading to positive self-regard. Positive self-regard is Rogers's version of the Freudian superego, and it derives from **conditional positive regard**. We noted that unconditional positive regard involves the parents' love and acceptance of the infant without conditions, independent of the child's behavior. Conditional positive regard is the opposite. Parents may not react to everything their infant does with positive regard. Some behaviors annoy, frighten, or bore them and for those behaviors they may not provide affection or approval. Thus, infants learn that parental affection has a price; it depends on behaving appropriately. They come to understand that sometimes they are prized, and sometimes they are not. If a parent expresses annoyance every time the infant drops an object out of the crib, the child learns to disapprove of himself or herself for behaving that way. External standards of judgment become internal and personal. In a sense, then, children come to punish themselves as their parents did. Children develop self-regard only in situations that have brought parental approval, and in time the self-concept, thus formed, comes to function as a parental surrogate. These are conditions of worth. Children believe they are worthy only under certain conditions, the ones that brought parental positive regard and then personal positive self-regard. Having internalized their parents' norms and standards, they view themselves as worthy or unworthy, good or bad, according to the terms their parents defined. Children thus learn to avoid behaviors that otherwise might be personally satisfying. Therefore, they no longer function freely. Because they feel the need to evaluate their behaviors

and attitudes so carefully, and refrain from taking certain actions, children are prevented from fully developing or actualizing the self. They inhibit their development by living within the confines of their conditions of worth.

### **Incongruence:**

Not only do children learn, ideally, to inhibit unacceptable behaviors, but they also may come to deny or distort unacceptable ways of perceiving their experiential world. By holding an inaccurate perception of certain experiences, they risk becoming estranged from their true self. We come to evaluate experiences, and accept or reject them, not in terms of how they contribute to the overall actualization tendency through the organismic valuing process, but in terms of whether they bring positive regard from others. This leads to incongruence between the self-concept and the experiential world, the environment as we perceive it. Experiences that are incongruent or incompatible with our self-concept become threatening and are manifested as anxiety. For example, if our self-concept includes the belief that we love all humanity, once we meet someone toward whom we feel hatred, we are likely to develop anxiety. Hating is not congruent with our image of us as loving persons. To maintain our self-concept, we must deny the hatred. We defend ourselves against the anxiety that accompanies the threat by distorting it, thus closing off a portion of our experiential field. The result is a rigidity of some of our perceptions.

Our level of psychological adjustment and emotional health is a function of the congruence or compatibility between our self-concept and our experiences. Psychologically healthy people are able to perceive themselves, other people, and events in their world much as they really are. Psychologically healthy people are open to new experiences because nothing threatens their self-concept. They have no need to deny or distort their perceptions because as children they received unconditional positive regard and did not have to internalize any conditions of worth. They feel worthy under all conditions and situations and are able to use all their experiences. They can develop and actualize all facets of the self, proceeding toward the goal of becoming a fully functioning person and leading what Rogers called “the good life.”

### **Characteristics of fully functioning :**

To Rogers, the fully functioning person is the desired result of psychological development and social evolution (Rogers, 1961). He described several characteristics of fully functioning (self-actualizing) persons.

**Fully functioning persons are aware of all experience.** No experience is distorted or denied; all of it filters through to the self. There is no defensiveness because there is nothing to defend against, nothing to threaten the self-concept. Fully functioning persons are open to positive feelings such as courage and tenderness, and to negative feelings such as fear and pain. They are more emotional in the sense that they accept a wider range of positive and negative emotions and feel them more intensely.

**Fully functioning persons live fully and richly in every moment.** All experiences are potentially fresh and new. Experiences cannot be predicted or anticipated but are participated in fully rather than merely observed.

**Fully functioning persons trust in their own organism.** By this phrase Rogers meant that fully functioning persons trust their own reactions rather than being guided by the opinions of others, by a social code, or by their intellectual judgments. Behaving in a way that feels right is a good guide to behaving in a way that is satisfying. Rogers did not suggest that fully functioning persons ignore information from their own intellect or from other people. Rather, he meant that all data are accepted as congruent with the fully functioning person's self-concept. Nothing is threatening; all information can be perceived, evaluated, and weighed accurately. Thus, the decision about how to behave in a particular situation results from a consideration of all experiential data. Fully functioning persons are unaware of making such considerations, however, because of the congruence between their self-concept and experience, so their decisions appear to be more intuitive and emotional than intellectual.

**Fully functioning persons feel free to make choices without constraints or inhibitions.** This brings a sense of power because they know their future depends on their own actions and not by present circumstances, past events, or other people. They do not feel compelled, either by themselves or by others, to behave in only one way.

**Fully functioning persons are creative and live constructively and adaptively as environmental conditions change.** Allied with creativity is spontaneity. Fully functioning persons are flexible and seek new experiences

and challenges. They do not require predictability, security, or freedom from tension.

**Fully functioning persons may face difficulties.** The condition involves continually testing, growing, striving, and using all of one's potential, a way of life that brings complexity and challenge. Rogers did not describe fully functioning persons as happy, blissful, or contented, although at times they may be. More appropriately their personality may be described as enriching, exciting, and meaningful. Rogers used the word *actualizing*, not *actualized*, to characterize the fully functioning person. The latter term implies a finished or static personality, which was not Rogers's intent. Self-development is always in progress. Rogers wrote that being fully functioning is "a direction, not a destination" (Rogers, 1961, p. 186). If striving and growing cease, then the person loses spontaneity, flexibility, and openness. Rogers's emphasis on change and growth is neatly captured in the word *becoming* in the title of his book, *On Becoming a Person* (Rogers, 1961)

## **Behavioural- B.F.Skinner :**

### **Reinforcement: The Basis of Behavior:**

Skinner's approach to behavior, simple in concept, is based on thousands of hours of well-controlled research. His fundamental idea is that behavior can be controlled by its consequences, that is, by what follows the behavior. Skinner believed that an animal or a human could be trained to perform virtually any act and that the type of reinforcement that followed the behavior would be responsible for determining it. Thus, whoever controls the reinforcers has the power to control human behavior, in the same way an experimenter can control the behavior of a laboratory rat. Respondent Behavior  
respondent behavior  
Responses made to or elicited by specific environmental stimuli. Responses made to or elicited by specific environmental stimuli. Skinner distinguished between two kinds of behavior: respondent behavior and operant behavior. Respondent behavior involves a response made to or elicited by a specific stimulus. A reflexive behavior such as a knee jerk is an example of respondent behavior. A stimulus is applied (a tap on the knee) and the response occurs (the leg jerks). This behavior is unlearned. It occurs

automatically and involuntarily. We do not have to be trained or conditioned to make the appropriate response. At a higher level is respondent behavior that is learned. This learning, called conditioning, involves the substitution of one stimulus for another. The concept originated in the work of the Russian physiologist Ivan Pavlov in the early 1900s. Later, Pavlov's ideas on conditioning were adopted by John B. Watson as the basic research method for behaviorism.

Working with dogs, Pavlov discovered that they would salivate to neutral stimuli such as the sound of their keeper's footsteps. Previously, the salivation response had been elicited by only one stimulus, the sight of food. Intrigued by this observation, Pavlov studied the phenomenon systematically. He sounded a bell shortly before feeding a dog. At first, the dog salivated only in response to the food and not to the bell because the bell had no meaning. However, after a number of pairings of the bell followed by the food, the dog began to salivate at the sound of the bell. Thus, the dog had been conditioned, or trained, to respond to the bell. The dog's response shifted from the food to what previously had been a neutral stimulus.

**Reinforcement** The act of strengthening a response by adding a reward, thus increasing the likelihood that the response will be repeated.

**Extinction** The process of eliminating a behavior by withholding reinforcement.

Animals can be conditioned by reinforcing them with food when they exhibit desired behaviors. This classic experiment by Pavlov demonstrated the importance of reinforcement. The dogs would not learn to respond to the bell unless they were rewarded for doing so. In this example, the reward was food. Pavlov then formulated a fundamental law of learning: A conditioned response cannot be established in the absence of reinforcement. The act of reinforcing a response strengthens it and increases the likelihood that the response will be repeated. However, an established conditioned response will not be maintained in the absence of reinforcement. Consider a dog conditioned to respond to the sound of a bell. Every time the bell rings, the dog salivates. Then the experimenter stops presenting food after sounding the bell. The dog hears the bell and nothing happens—no more food, no more reinforcement or reward. With successive ringing of the bell, the dog's salivary response decreases in

frequency and intensity until no response occurs at all. This process is called extinction. The response has been wiped out or extinguished because reinforcers or rewards for it were no longer provided. A great deal of research has demonstrated that the greater the reinforcement given during training, the more resistant the conditioned response will be to extinction (see, for example, Shull & Grimes, 2006). Eventually, however, extinction will occur.

### **Operant Behavior :**

Respondent behavior depends on reinforcement and is related directly to a physical stimulus. Every response is elicited by a specific stimulus. To Skinner, respondent behavior was less important than operant behavior. We are conditioned to respond directly to many stimuli in our environment, but not all behavior can be accounted for in this way. Much human behavior appears to be spontaneous and cannot be traced directly to a specific stimulus. Such behavior is emitted rather than elicited by a stimulus. It involves acting in a way that appears to be voluntary rather than reacting involuntarily to a stimulus to which we have been conditioned. The nature and frequency of operant behavior will be determined or modified by the reinforcement that follows the behavior. Respondent behavior has no effect on the environment. In Pavlov's experiment, the dog's salivary response to the ringing bell did nothing to change the bell or the reinforcer (the food) that followed. In contrast, operant behavior operates on the environment and, as a result, changes it.

### **Schedules of Reinforcement**

Skinner pointed out that in everyday life outside the psychology laboratory, our behavior is rarely reinforced every time it occurs. A baby is not picked up and cuddled every time he or she cries. Baseball superstars do not hit a home run every time at bat. The bagger in the supermarket does not receive a tip for each bag packed. And your favorite singing group doesn't win a Grammy for every album it records. You can think of many more examples of behaviors that persist even though they are reinforced only occasionally.

**Reinforcement schedules:** Patterns or rates of providing or withholding reinforcers. After observing that his rats continued to press the bar at a fairly constant rate even when they were not being reinforced for each response, Skinner decided to investigate different reinforcement schedules to determine their effectiveness in controlling behavior. Among the rates of reinforcement he tested are the following.

- Fixed interval
- Fixed ratio
- Variable interval
- Variable ratio

A fixed-interval schedule of reinforcement means that the reinforcer is presented following the first response that occurs after a fixed time interval has elapsed. That interval might be 1 minute, 3 minutes, or any other fixed period of time. The timing of the reinforcement has nothing to do with the number of responses. Whether the rat responds 3 times or 20 times a minute during the fixed time interval, the reinforcer still arrives only after the passage of a given time period and the emission of the correct response. Many situations operate in accordance with the fixed-interval reinforcement schedule. If your professor gives a midterm and a final examination, he or she is using a fixed-interval schedule. A job in which your salary is paid once a week or once a month operates on the fixed-interval schedule. You are not paid according to the number of items you produce or the number of sales you make (the number of responses) but by the number of hours, days, or weeks that elapse. Skinner's research showed that the shorter the interval between presentations of the reinforcer, the greater the frequency of response. The response rate declined as the interval between reinforcements lengthened. How frequently reinforcers appeared also affected how quickly the response could be extinguished. The response stopped sooner if the rat had been reinforced continuously and the reinforcement was then stopped than if the rat had been reinforced intermittently. In the fixed-ratio schedule of reinforcement, reinforcers are given only after the organism has made a specified number of responses. For example, the experimenter could reinforce after every 10th or 20th response. In this schedule, unlike the fixed-interval schedule, the presentation of reinforcers depends on how often the subject responds. The rat will not receive a food pellet until it emits the required number of responses. This reinforcement schedule brings about a faster rate of responding than does the fixed-interval schedule. The higher response rate for the fixed-ratio reinforcement schedule also applies to humans. In a job in which your pay is determined on a piece-rate basis, how much you earn depends on how much you produce. The more items you produce, the higher your pay. Your reward is based directly on your response rate. The same is true for a salesperson working on commission.



Income depends on the number of products sold; the more sold, the more earned. In contrast, a salesperson on a weekly salary earns the same amount each week regardless of the number of items sold. But everyday life doesn't always permit a fixed-interval or fixed-ratio reinforcement schedule. Sometimes reinforcers are presented on a variable basis. In the variable-interval schedule of reinforcement, the reinforcer might appear after 2 hours in the first instance, after 1 1/2 hours the next time, and after 2 hours and 15 minutes the third time. A person who spends the day fishing might be rewarded, if at all, on a variable-interval basis. The reinforcement schedule is determined by the random appearance of fish nibbling at the bait. A variable-ratio schedule of reinforcement is based on an average number of responses between reinforcers, but there is great variability around that average. Skinner found that the variable-ratio schedule is effective in bringing about high and stable response rates, as the people who operate gambling casinos can happily attest. Slot machines, roulette wheels, horse races, and the state lottery games pay on a variable-ratio reinforcement schedule, an extremely effective means of controlling behavior. Variable reinforcement schedules result in enduring response behaviors that tend to resist extinction. Most everyday learning occurs as a result of variable interval or variable-ratio reinforcement schedules.

Skinner's research on reinforcement schedules provides an effective technique for controlling, modifying, and shaping behavior. If you are in charge of rats, salespeople, or assembly-line workers, or are trying to train your pet or your child, these operant-conditioning techniques can bring about the behaviors you desire.

### **Successive Approximation:**

The Shaping of Behavior In Skinner's original operant-conditioning experiment, the operant behavior (pressing the lever) is a simple behavior that a laboratory rat would be expected to display eventually in the course of exploring its environment. Thus, the chance is high that such a behavior will occur, assuming the experimenter has sufficient patience. It is obvious, however, that animals and humans demonstrate many more complex operant behaviors that have a much lower probability of occurrence in the normal course of events. How are these complex behaviors learned? How can an experimenter or a parent reinforce and condition a pigeon or a child to perform

behaviors that are not likely to occur spontaneously? **Successive approximation** An explanation for the acquisition of complex behavior. Behavior such as learning to speak will be reinforced only as it comes to approximate or approach the final desired behavior. An explanation for the acquisition of complex behavior. Behavior such as learning to speak will be reinforced only as it comes to approximate or approach the final desired behavior. Skinner answered these questions with the method of successive approximation, or shaping (Skinner, 1953). He trained a pigeon in a very short time to peck at a specific spot in its cage. The probability that the pigeon on its own would peck at that exact spot was low. At first, the pigeon was reinforced with food when it merely turned toward the designated spot. Then reinforcement was withheld until the pigeon made some movement, however slight, toward the spot. Next, reinforcement was given only for movements that brought the pigeon closer to the spot. After that, the pigeon was reinforced only when it thrust its head toward the spot. Finally, the pigeon was reinforced only when its beak touched the spot. Although this sounds like a time-consuming process, Skinner conditioned pigeons in less than 3 minutes. The experimental procedure itself explains the term successive approximation. The organism is reinforced as its behavior comes in successive, or consecutive, stages to approximate the final behavior desired. Skinner suggested that this is how children learn the complex behavior of speaking. Infants spontaneously emit meaningless sounds, which parents reinforce by smiling, laughing, and talking. After a while, parents reinforce this babbling in different ways, providing stronger reinforcers for sounds that approximate words. As the process continues, parental reinforcement becomes more restricted, given only for appropriate usage and pronunciation. Thus, the complex behavior of acquiring language skills is shaped by providing differential reinforcement in stages. Skinner once shaped the behavior of a noted psychoanalyst, Erich Fromm, whose comments during a lecture annoyed him.

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successive approximation An explanation for the acquisition of complex behavior. Behavior such as learning to speak will be reinforced only as it comes to approximate or approach the final desired behavior. An explanation for the acquisition of complex behavior. Behavior such as learning to speak will be reinforced only as it comes to approximate or approach the final desired behavior. Skinner answered these questions with the method of successive approximation, or shaping (Skinner, 1953). He trained a pigeon in a very short time to peck at a specific spot in its cage. The probability that the pigeon on its own would peck at that exact spot was low. At first, the pigeon was reinforced with food when it merely turned toward the designated spot. Then reinforcement was withheld until the pigeon made some movement, however slight, toward the spot. Next, reinforcement was given only for movements that brought the pigeon closer to the spot. After that, the pigeon was reinforced only when it thrust its head toward the spot. Finally, the pigeon was reinforced only when its beak touched the spot. Although this sounds like a time-consuming process, Skinner conditioned pigeons in less than 3 minutes. The experimental procedure itself explains the term successive approximation. The organism is reinforced as its behavior comes in successive, or consecutive, stages to approximate the final behavior desired. Skinner suggested that this is how children learn the complex behavior of speaking. Infants spontaneously emit meaningless sounds, which parents reinforce by smiling, laughing, and talking. After a while, parents reinforce this babbling in different ways, providing stronger reinforcers for sounds that approximate words. As the process continues, parental reinforcement becomes more restricted, given only for appropriate usage and pronunciation. Thus, the complex behavior of acquiring language skills is shaped by providing differential reinforcement in stages. Skinner once shaped the behavior of a noted psychoanalyst, Erich Fromm, whose comments during a lecture annoyed him.

### **Superstitious behavior:**

Superstitious Behavior © Brand X Pictures/Jupiterimages We know that life is not always as orderly or well controlled as events in the psychology laboratory. Sometimes we are reinforced accidentally after we have displayed some

behavior. As a result, that behavior, which did not lead to or cause the reinforcement, may be repeated in a similar situation. superstitious behavior

superstitious behavior Persistent behavior that has a coincidental and not a functional relationship to the reinforcement received. Persistent behavior that has a coincidental and not a functional relationship to the reinforcement received. Consider an example from football. An offensive lineman for the Tampa Bay (FL) Buccaneers was having a terrible season early in his career. He asked his roommate to switch beds so that he could sleep closer to the bathroom. Immediately thereafter, his playing improved. For the rest of his career, he insisted on the bed nearest the bathroom door in every motel in which the team stayed. And the NFL kicker who hugged the goal posts before each game? He had done it once before making a successful kick, so because it had worked then, he continued the practice. He told a reporter that he wanted the goal posts to know he loved them and to implore them to stay still when he kicked. Skinner called this phenomenon superstitious behavior and demonstrated it in the laboratory. A hungry pigeon was placed in the operant-conditioning apparatus and reinforced every 15 seconds on a fixed-interval schedule. It is likely that the pigeon would be doing something, displaying some behavior or activity, when the reinforcing food pellet was presented. It might be turning, raising its head, strutting, hopping, or standing still. Whatever behavior was being emitted at the moment of reward would be reinforced. Skinner found that a single reinforcement was powerful enough to lead the pigeon to repeat the accidentally reinforced behavior more frequently for a while, which increased the probability that another food pellet would appear while the same behavior was being shown. And with short intervals between reinforcers, superstitious behaviors are learned quickly. Like the football players in the examples above, the **superstitious behaviors** offered by the pigeon have no functional relationship to the reinforcers. The connection is unintentional. In humans, such behaviors may persist throughout life and require only occasional reinforcement to sustain them. A study of 77 big-league baseball players in the United States and Japan found that 74 percent of the players admitted engaging in superstitious behavior. In general, however, American players were more superstitious than Japanese players, suggesting that cultural differences may influence the extent of these actions (Burger & Lynn, 2005).

### **The Self-Control of Behavior:**

Self-control: The ability to exert control over the variables that determine our behavior. According to Skinner, behavior is controlled and modified by variables that are external to the organism. There is nothing inside us—no process, drive, or other internal activity—that determines behavior. However, although these external stimuli and reinforcers are responsible for shaping and controlling behavior, we have the ability to use what Skinner called self-control, which he described as acting to alter the impact of external events. Skinner did not mean acting under the control of some mysterious “self.” He suggested that to some extent we can control the external variables that determine our behavior. Skinner proposed several self-control techniques. In stimulus avoidance, for example, if the music from your roommate’s stereo annoys you and interferes with your studying, you could leave the room and go to the library, removing yourself from an external variable that affects your behavior. By avoiding a person or situation that makes you angry, you reduce the control that person or situation has over your behavior. Similarly, alcoholics can act to avoid a stimulus that controls their behavior by not allowing liquor to be kept in their home. Through the technique of self-administered satiation, we exert control to cure ourselves of bad habits by overdoing the behavior. Smokers who want to quit can chain-smoke for a period of time, inhaling until they become so disgusted, uncomfortable, or ill that they quit. This technique has been successful in formal therapeutic programs designed to eliminate smoking. The aversive stimulation technique of self-control involves unpleasant or repugnant consequences. Obese people who want to lose weight declare their intention to their friends. If they do not keep their resolution, they face the unpleasant consequences of personal failure, embarrassment, and criticism. In self-reinforcement, we reward ourselves for displaying good or desirable behaviors. A teenager who agrees to strive for a certain grade point average or to care for a younger brother or sister might reward himself or herself by buying concert tickets or new clothes. To Skinner, then, the crucial point is that external variables shape and control behavior. But sometimes, through our own actions, we can modify the effects of these external forces. A large-scale study of 606 college students in the United States found that those who scored high on a measure of self-control had better grades, higher psychological adjustment scores, and greater self-acceptance and self-esteem. They also showed better interpersonal skills and family relationships, as well as lower levels of anger compared to those who scored low on self-control (Tangney, Baumeister, & Boone, 2004). Research involving 670 African-

American children (average age 11.2 years) found that those whose parents were more nurturing and involved in their upbringing had higher levels of self-control than those whose parents were less nurturing and involved (Wills et al., 2007).

### **Albert Bandura: Modelling :**

#### **Modeling: The Basis of Observational Learning:**

Bandura's basic idea is that learning can occur through observation or example rather than solely by direct reinforcement. Bandura does not deny the importance of direct reinforcement as a way to influence behavior, but he challenges the notion that behavior can be learned or changed only through direct reinforcement. He argues that operant conditioning, in which trial-and-error behavior continues until the person happens upon the correct response, is an inefficient and potentially dangerous way to learn skills such as swimming or driving. A person could drown or crash before finding the correct sequence of behaviors that brings positive reinforcement. To Bandura, most human behavior is learned through example, either intentionally or accidentally. We learn by observing other people and patterning our behavior after theirs.

#### **Bobo Doll Studies:**

Through modeling, by observing the behavior of a model and repeating the behavior ourselves, it is possible to acquire responses that we have never performed or displayed previously and to strengthen or weaken existing responses. Bandura's now-classic demonstration of modeling involves the Bobo doll, an inflatable plastic figure 3 to 4 feet tall (Bandura, Ross, & Ross, 1963). The subjects in the initial studies were preschool children who watched an adult hit and kick Bobo. While attacking the doll, the adult model shouted, "Sock him in the nose!" and "Throw him in the air!" When the children were left alone with the doll, they modeled their behavior after the example they had just witnessed. Their behavior was compared with that of a control group of children who had not seen the model attack the Bobo doll. The experimental group was found to be twice as aggressive as the control group. The intensity of the aggressive behavior remained the same in the experimental subjects whether the model was seen live, on television, or as a cartoon character. The effect of the model in all three media was to elicit aggressive behavior, actions that were

not displayed with the same strength by children who had not observed the models.

### **Other modelling studies :**

In additional research on the impact of modeling on learning, Bandura compared the behavior of parents of two groups of children (Bandura & Walters, 1963). One group consisted of highly aggressive children, the other of more inhibited children. According to Bandura's theory, the children's behavior should reflect their parents' behavior. The research showed that the parents of the inhibited children were inhibited, and the parents of the aggressive children were aggressive. Verbal modeling can induce certain behaviors, as long as the activities involved are fully and adequately explained. Verbal modeling is often used to provide instructions, a technique applicable to teaching such skills as driving a car. Verbal instructions are usually supplemented by behavioral demonstrations, such as when a driving instructor serves as a model performing the behaviors involved in driving.

### **Disinhibition:**

Research has shown that behaviors a person usually suppresses or inhibits may be performed more readily under the influence of a model (Bandura, 1973, 1986). This phenomenon, called disinhibition, refers to the weakening of an inhibition or restraint through exposure to a model. For example, people in a crowd may start a riot, breaking windows and shouting, exhibiting physical and verbal behaviors they would never perform when alone. They are more likely to discard their inhibitions against aggressive behavior if they see other people doing so. The disinhibition phenomenon can influence sexual behavior. In an experiment that demonstrated how sexual responses could be disinhibited by models, a group of male undergraduate college students was shown a film that contained erotic pictures of nude males and females (Walters, Bowen, & Parke, 1963). The students were told that a spot of light would move over the film, indicating the eye movements of a previous subject, to show what parts of the pictures that subject looked at. These alleged eye movements of the previous subject represented the model. For half the subjects, the spot of light concentrated on breasts and genitals. For the other half, the light stayed in the background, as though the model had avoided looking at the naked bodies. After watching the film, the students were shown stills from the movie while their eye movements were recorded. Those subjects whose model was

considered uninhibited (who had looked directly at the erotic parts of the bodies) behaved similarly. Those whose model had avoided looking at the nudes spent significantly more time examining the background of the pictures. The researchers concluded that modeling affected the subjects' perceptual responses to the stimuli. In other words, modelling determined not only what the subjects did but also what they looked at and perceived.

### **The Effects of Society's Models:**

On the basis of extensive research, Bandura concluded that much behavior—good and bad, normal and abnormal—is learned by imitating the behavior of other people. From infancy on, we develop responses to the models society offers us. Beginning with parents as models, we learn their language and become socialized by the culture's customs and acceptable behaviors. People who deviate from cultural norms have learned their behavior the same way as everyone else. The difference is that deviant persons have followed models the rest of society considers undesirable. Bandura is an outspoken critic of the type of society that provides the wrong models for its children, particularly the examples of violent behavior that are standard fare on television and in movies and video games. His research clearly shows the effect of models on behavior. If what we see is what we become, then the distance between watching an aggressive animated character and committing a violent act ourselves is not very great. Among the many behaviors children acquire through modeling are non-rational fears. A child who sees that his or her parents are fearful during thunderstorms or are nervous around strangers will easily adopt these anxieties and carry them into adulthood with little awareness of their origin. Of course, positive behaviors such as strength, courage, and optimism will also be learned from parents and other models. In Skinner's system, reinforcers control behavior; for Bandura, it is the models who control behavior.

### **Characteristics of the Modeling :**

Situation Bandura and his associates (Bandura, 1977, 1986) investigated three factors found to influence modeling: the characteristics of the models, the characteristics of the observers, and the reward consequences associated with the behaviors.



**Characteristics of the models.** The characteristics of the models affect our tendency to imitate them. In real life, we may be more influenced by someone who appears to be similar to us than by someone who differs from us in obvious and significant ways. In the laboratory, Bandura found that although children imitated the behavior of a child model in the same room, a child in a film, and a filmed cartoon character, the extent of the modeling decreased as the similarity between the model and the subject decreased. The children showed greater imitation of a live model than an animated character, but even in the latter instance the modeled behavior was significantly greater than that of the control group that observed no models. Other characteristics of the model that affect imitation are age and sex. We are more likely to model our behavior after a person of the same sex than a person of the opposite sex. Also, we are more likely to be influenced by models our own age. Peers who appear to have successfully solved the problems we are facing are highly influential models. Status and prestige are also important factors. It was found that pedestrians were much more likely to cross a street against a red light if they saw a well-dressed person crossing than if they saw a poorly dressed person crossing. Television commercials make effective use of high-status, high-prestige models with athletes or celebrities who claim to use a particular product. The expectation is that consumers will imitate their behavior and buy the advertised product. The type of behavior the model performs affects the extent of imitation. Highly complex behaviors are not imitated as quickly and readily as simpler behaviors. Hostile and aggressive behaviors tend to be strongly imitated, especially by children.

**Characteristics of the observers.** The attributes of the observers also determine the effectiveness of observational learning. People who are low in self-confidence and self-esteem are much more likely to imitate a model's behavior than are people high in self-confidence and self-esteem. A person who has been reinforced for imitating a behavior—for example, a child rewarded for behaving like an older sibling—is more susceptible to the influence of models.

**The reward consequences associated with the behaviors:** The reward consequences linked to a particular behavior can affect the extent of the modeling and even override the impact of the models' and observers' characteristics. A high-status model may lead us to imitate a certain behavior, but if the rewards are not meaningful to us, we will discontinue the behavior and be less likely to be influenced by that model in the future. Seeing a model

being rewarded or punished for displaying a particular behavior affects imitation. In a Bobo doll study, some of the children watched as the model who hit the Bobo doll was given praise and a soda and candy. Another group of children saw the model receive verbal and physical punishment for the same aggressive behavior. The children who observed the punishment displayed significantly less aggression toward the Bobo doll than did the children who saw the model being reinforced (Bandura, 1965).

## **The Processes of Observational Learning**

Bandura analyzed the nature of observational learning and found it to be governed by four related mechanisms: attentional processes, retention processes, production processes, and incentive and motivational processes.

### **Attentional Processes**

Observational learning or modeling will not occur unless the subject pays attention to the model. Merely exposing the subject to the model does not guarantee that the subject will be attentive to the relevant cues and stimulus events or even perceive the situation accurately. The subject must perceive the model accurately enough to acquire the information necessary to imitate the model's behavior. Several variables influence attentional processes. In the real world, as in the laboratory, we are more attentive and responsive to some people and situations than to others. Thus, the more closely we pay attention to a model's behavior, the more likely we are to imitate it. We have mentioned such characteristics as age, status, sex, and the degree of similarity between model and subject. These factors help determine how closely a subject attends to the model. It has also been found that celebrity models, experts, and those who appear confident and attractive command greater attention and imitation than models who lack these attributes. Some of the most effective models in American culture today appear on television. Viewers often focus on them even in the absence of reinforcement.

Attention to modeled behavior varies as a function of the observers' cognitive and perceptual skills and the value of the behavior being modeled. The more highly developed are our cognitive abilities and the more knowledge we have about the behavior being modeled, the more carefully we will attend to the model and perceive the behavior. When observers watch a model doing

something they expect to do themselves, they pay greater attention than when the modeled behavior has no personal relevance. Observers also pay closer attention to modeled behavior that produces positive or negative consequences rather than neutral outcomes.

### **Retention Processes**

We must be able to remember significant aspects of the model's behavior in order to repeat it later. To retain what has been attended to, we must encode it and represent it symbolically. These internal retention processes of symbolic representation and image formation are cognitive processes. Thus, Bandura recognizes the importance of cognitive processes in developing and modifying behavior. Recall, for comparison, that Skinner's focus was exclusively on overt behavior. We retain information about a model's behavior in two ways: through an imaginal internal representational system or through a verbal system. In the imaginal system, we form vivid, easily retrievable images while we are observing the model. This common phenomenon accounts for your being able to summon up a picture of the person you dated last week or the place you visited last summer. In observational learning, we form a mental picture of the model's behavior and use it as a basis for imitation at some future time. The verbal representational system operates similarly and involves a verbal coding of some behavior we have observed. For example, during observation we might describe to ourselves what the model is doing. These descriptions or codes can be rehearsed silently, without overtly displaying the behavior. For example, we might talk ourselves through the steps in a complicated skill, mentally rehearsing the sequence of behaviors we will perform later. When we wish to perform the action, the verbal code will provide hints, reminders, and cues. Together, these images and verbal symbols offer the means by which we store observed situations and rehearse them for later performance.

### **Production Processes**

Translating imaginal and verbal symbolic representations into overt behavior requires the production processes, described more simply as practice. Although we may have attended to, retained, and rehearsed symbolic representations of a model's behavior, we still may not be able to perform the behavior correctly. This is most likely to occur with highly skilled actions that require the mastery of many component behaviors. Consider learning to drive a car. We learn fundamental motions from a lecture and from watching a model drive. We may

consider the symbolic representations of the model's behavior many times, but at first our translation of these symbols into actual driving behavior will be clumsy. We may apply the brakes too soon or too late or overcorrect the steering. Our observations may not have been sufficient to ensure immediate and skilled performance of the actions. Practice of the proper physical movements, and feedback on their accuracy, is needed to produce the smooth performance of the behavior.

### **Incentive and Motivational process:**

No matter how well we attend to and retain behaviors we observe or how much ability we have to perform them, we will not do so without the incentive or motivation processes. When incentives are available, observation is more quickly translated into action. Incentives also influence the attentional and retention processes. We may not pay as much attention without an incentive to do so, and when less attention is paid, there is less to retain. Our incentive to learn is influenced by our anticipation of the reinforcement or punishment for doing so. Seeing that a model's behavior produces a reward or avoids a punishment can be a strong incentive for us to pay attention to, remember, and perform a behavior correctly. The reinforcement is experienced vicariously during our observation of the model, after which we expect our performance of the same behavior to lead to the consequences we saw. Bandura pointed out that although reinforcement can facilitate learning, reinforcement is not required for learning to occur. Many factors other than the reward consequences of the behavior determine what we attend to, retain, and rehearse. For example, loud sounds, bright lights, and exciting videos may capture our interest even though we may not have received any reinforcement for paying attention to them. Bandura's research showed that children watching a model on television imitate the model's behavior regardless of whether they have been promised a reward. Therefore, reinforcement can assist in modeling but is not vital to it. When reinforcement occurs, it can be given by another person, experienced vicariously, or administered by oneself.

### **Self-Reinforcement and Self-Efficacy:**

In Bandura's approach to personality, the self is not some psychic agent that determines or causes behavior. Rather, the self is a set of cognitive processes and structures concerned with thought and perception.

### **Self reinforcement:**

Self-reinforcement is as important as reinforcement administered by others, particularly for older children and adults. We set personal standards of behavior and achievement. We reward ourselves for meeting or exceeding these expectations and standards and we punish ourselves for our failures. Self-administered reinforcement can be tangible such as a new pair of gym shoes or a car, or it can be emotional such as pride or satisfaction from a job well done. Self-administered punishment can be expressed in shame, guilt, or depression about not behaving the way we wanted to.

Self-reinforcement appears conceptually similar to what other theorists call conscience or superego, but Bandura denies that it is the same. A continuing process of self-reinforcement regulates much of our behavior. It requires internal standards of performance, subjective criteria or reference points against which we evaluate our behavior. Our past behavior may become a reference point for evaluating present behavior and an incentive for better performance in the future. When we reach a certain level of achievement, it may no longer challenge, motivate, or satisfy us, so we raise the standard and require more of ourselves. Failure to achieve may result in lowering the standard to a more realistic level. People who set unrealistic performance standards—who observed and learned behavioral expectations from unusually talented and successful models—may continue to try to meet those excessively high expectations despite repeated failures. Emotionally, they may punish themselves with feelings of worthlessness and depression. These self-produced feelings can lead to self-destructive behaviors such as alcohol and drug abuse or a retreat into a fantasy world. We learn our initial set of internal standards from the behavior of models, typically our parents and teachers. Once we adopt a given style of behavior, we begin a lifelong process of comparing our behavior with theirs.

### **Self efficacy, or “Believing you can”:**

How well we meet our behavioral standards determines our self-efficacy. In Bandura’s system, self-efficacy refers to feelings of adequacy, efficiency, and competence in coping with life. Meeting and maintaining our performance standards enhances self-efficacy; failure to meet and maintain them reduces it. Another way Bandura described self-efficacy was in terms of our perception of the control we have over our life. People strive to exercise control over events

that affect their lives. By exerting influence in spheres over which they can command some control, they are better able to realize desired futures and to forestall undesired ones. The striving for control over life circumstances permeates almost everything people do because it can secure them innumerable personal and social benefits. The ability to affect outcomes makes them predictable. Predictability fosters adaptive preparedness. Inability to exert influence over things that adversely affect one's life breeds apprehension, apathy, or despair. (Bandura, 1995, p. 1) People low in self-efficacy feel helpless, unable to exercise control over life events. They believe any effort they make is futile. When they encounter obstacles, they quickly give up if their initial attempt to deal with a problem is ineffective. People who are extremely low in self-efficacy will not even attempt to cope because they are convinced that nothing they do will make a difference. Why, they ask, should they even try? Low self-efficacy can destroy motivation, lower aspirations, interfere with cognitive abilities, and adversely affect physical health. People high in self-efficacy believe they can deal effectively with events and situations. Because they expect to succeed in overcoming obstacles, they persevere at tasks and often perform at a high level. These people have greater confidence in their abilities than do persons low in self-efficacy, and they express little self-doubt. They view difficulties as challenges instead of threats and actively seek novel situations. High self-efficacy reduces fear of failure, raises aspirations, and improves problem solving and analytical thinking abilities. One researcher defined self-efficacy quite simply and effectively as the "power of believing you can," and added that "believing that you can accomplish what you want to accomplish is one of the most important ingredients . . . in the recipe for success" (Maddux, 2002, p. 277). Thus, believing that you have the ability to be successful becomes a powerful asset as you strive for achievement.

**Sources of information about self-efficacy.** Our judgment about our self-efficacy is based on four sources of information: performance attainment, vicarious experiences, verbal persuasion, and physiological and emotional arousal. The most influential source of efficacy judgments is performance attainment. Previous success experiences provide direct indications of our level of mastery and competence. Prior achievements demonstrate our capabilities and strengthen our feelings of self-efficacy. Prior failures, particularly repeated failures in childhood, lower self-efficacy. An important indicator of performance attainment is receiving feedback on one's progress or one's performance on a task, such as a work assignment or a college examination.

One study of 97 college students performing complicated puzzles found that those who received positive feedback on their performance reported higher levels of perceived competence at that task than did those who received negative feedback (Elliot, Faler, McGregor, Campbell, Sedikides, & Harackiewicz, 2000). A study of 49 older adults showed that those who completed a 6-month training program in the Chinese art of Tai Chi reported significant increases in self-efficacy as compared to those who did not undertake the training (Li, McAuley, Harmer, Duncan, & Chaumeton, 2001). Similar results were obtained in a study of 125 women college students who completed a 16-hour physical self-defense training course. These students showed significantly higher levels of self-efficacy in a variety of areas including physical competence, general coping skills, and interpersonal assertiveness. A control group that had not taken the self-defense course showed no change in self-efficacy (Weitlauf, Cervone, Smith, & Wright, 2001). Thus, put simply, the more we achieve, the more we believe we can achieve, and the more competent and in control we feel. Short-term failures in adulthood can lower self-efficacy. In one study, 60 college students were given a cognitive task. Ratings of item difficulty and feedback indicated that they performed either very well or very poorly. Self-report measures of their self-efficacy expectations for future tasks showed that people who believed they had performed well on the cognitive task had high self-efficacy expectations for their future performance. Those who thought they had performed poorly had a low expectation about their future performance (Sanna & Pusecker, 1994). Vicarious experiences—seeing other people perform successfully—strengthen self-efficacy, particularly if the people we observe are similar in abilities. In effect, we are saying, “If they can do it, so can I.” In contrast, seeing others fail can lower self-efficacy: “If they can’t do it, neither can I.” Therefore, effective models are vital in influencing our feelings of adequacy and competence. These models also show us appropriate strategies for dealing with difficult situations. Verbal persuasion, which means reminding people that they possess the ability to achieve whatever they want to achieve, can enhance self-efficacy. This may be the most common of the four informational sources and one frequently offered by parents, teachers, spouses, coaches, friends, and therapists who say, in effect, “You can do it.” To be effective, verbal persuasion must be realistic. It is probably not the best advice to encourage someone 5 feet tall to play professional basketball when other sports, such as martial arts, might be more appropriate. A fourth source of information about self-efficacy is physiological

and emotional arousal. How fearful or calm do we feel in a stressful situation? We often use this type of information as a basis for judging our ability to cope. We are more likely to believe we will master a problem successfully if we are not agitated, tense, or bothered by headaches. The more composed we feel, the greater our self-efficacy. Whereas the higher our level of physiological and emotional arousal, the lower our self-efficacy. The more fear, anxiety, or tension we experience in a given situation, the less we feel able to cope.

Bandura concluded that certain conditions increase self-efficacy:

1. Exposing people to success experiences by arranging reachable goals increases performance attainment.
2. Exposing people to appropriate models who perform successfully enhances vicarious success experiences.
3. Providing verbal persuasion encourages people to believe they have the ability to perform successfully.
4. Strengthening physiological arousal through proper diet, stress reduction, and exercise programs increases strength, stamina, and the ability to cope.

In his research, Bandura applied these conditions to enhance self-efficacy in a variety of situations. He has helped subjects learn to play musical instruments, relate better to persons of the opposite sex, master computer skills, give up cigarette smoking, and conquer phobias and physical pain.

## **Developmental Stages of Modeling and Self-Efficacy**

### **Childhood**

In infancy, modeling is limited to immediate imitation. Infants have not yet developed the cognitive capacities (the imaginal and verbal representational systems) needed to imitate a model's behavior at some time after observing it. In infancy, it is necessary for the modeled behavior to be repeated several times after the infant's initial attempt to duplicate it. Also, the modeled behavior must be within the infant's range of sensorimotor development. By about age 2, children have developed sufficient attentional, retention, and production processes to begin imitating behavior some time after the observation rather than immediately. The behaviors we find reinforcing, and thus choose to



imitate, will change with age. Younger children are reinforced primarily by physical stimuli such as food, affection, or punishment. Older children associate positive physical reinforcers with signs of approval from significant models and unpleasant reinforcers with signs of disapproval. Eventually these rewards or punishments become self-administered. Self-efficacy also develops gradually. Infants begin to develop self-efficacy as they attempt to exercise greater influence over their physical and social environments. They learn about the consequences of their own abilities such as their physical prowess, social skills, and language competence. These abilities are in almost constant use acting on the environment, primarily through their effects on parents. Ideally, parents are responsive to their growing child's activities and attempts to communicate, and will provide stimulating surroundings that permit the child the freedom to grow and explore. These early efficacy-building experiences are centered on the parents. Parental behaviors that lead to high self-efficacy in children differ for boys and girls. Studies have shown that high self-efficacy men had, when they were children, warm relationships with their fathers. Mothers were more demanding than fathers, expecting higher levels of performance and achievement. In contrast, high self-efficacy women experienced, as children, pressure from their fathers for high achievement (Schneewind, 1995). The significance of parental influence diminishes as the child's world expands and admits additional models such as siblings, peers, and other adults. Like Adler, Bandura considered birth order within the family to be important. He argued that first-born children and only children have different bases for judging their own abilities than do later-born children. Also, siblings of the same sex are likely to be more competitive than are siblings of the opposite sex, a factor also related to the development of self-efficacy. Among playmates, children who are the most experienced and successful at tasks and games serve as high-efficacy models for other children. Peers provide comparative reference points for appraising one's own level of achievement. Teachers influence self-efficacy judgments through their impact on the development of cognitive abilities and problem-solving skills, which are vital to efficient adult functioning. Children often rate their own competence in terms of their teachers' evaluations of them. In Bandura's view, schools that use ability groupings undermine self-efficacy and self-confidence in students who are assigned to the lower groups. Competitive practices such as grading on a curve also doom poor achievers to average or low grades.

## **Adolescence**

The transitional experiences of adolescence involve coping with new demands and pressures, from a growing awareness of sex to the choice of college and career. Adolescents must establish new competencies and appraisals of their abilities. Bandura noted that the success of this stage typically depends on the level of self-efficacy established during the childhood years.

### **Adulthood**

Bandura divided adulthood into two periods: young adulthood and the middle years. Young adulthood involves adjustments such as marriage, parenthood, and career advancement. High self-efficacy is necessary for successful outcomes of these experiences. People low in self-efficacy will not be able to deal adequately with these situations and are likely to fail to adjust. Studies show that women who feel high in self-efficacy about their parenting skills are likely to promote self-efficacy in their children. Women who believe they are good parents are less subject to despondency and emotional strain in their role as parent than are women low in self-efficacy (Olioff & Aboud, 1991; Teti & Gelfand, 1991). High self-efficacy mothers who worked outside the home experienced significantly less physical and emotional strain from work–family conflicts than did women low in self-efficacy (Bandura, 1995). The middle years of adulthood are also stressful as people reevaluate their careers and their family and social lives. As we confront our limitations and redefine our goals, we must reassess our skills and find new opportunities for enhancing our self-efficacy.

### **Old Age**

Self-efficacy reassessments in old age are difficult. Declining mental and physical abilities, retirement from active work, and withdrawal from social life may force a new round of self-appraisal. A lowering of self-efficacy can further affect physical and mental functioning in a kind of self-fulfilling prophecy. For example, reduced self-confidence about sexual performance can lead to a reduction in sexual activity. Lower physical efficacy can lead to fatigue and a curtailing of physical activities. If we no longer believe we can do something we used to enjoy and do well, then we may not even try. To Bandura, self-efficacy is the crucial factor in determining success or failure throughout the entire life span.

## **Behavior Modification:**

Bandura's goal in developing his social-cognitive theory was to modify or change those learned behaviors that society considers undesirable or abnormal. Like Skinner's approach to therapy, Bandura's focuses on external aspects, those inappropriate or destructive behaviors, in the belief that they are learned, just as all behaviors are learned. Bandura does not attempt to deal with underlying unconscious conflicts. It is the behavior or symptom, rather than any presumed internal neurosis that is the target of the social-learning approach.

**Fears and Phobias** If modeling is the way we learn our behaviors originally, then it should also be an effective way to relearn or change behavior. Bandura applied modeling techniques to eliminate fears and other intense emotional reactions. In one early study, children who were afraid of dogs observed a child of the same age playing with a dog (Bandura, Grusec, & Menlove, 1967). While the subjects watched from a safe distance, the model made progressively bolder movements toward the dog. The model petted the dog through the bars of a playpen, then went inside the pen and played with the dog. The observers' fear of dogs was considerably reduced as a result of this observational-learning situation. In the classic study of snake phobia, Bandura and his associates eliminated an intense fear of snakes in adult subjects (Bandura, Blanchard, & Ritter, 1969). The subjects watched a film in which children, adolescents, and adults made progressively closer contact with a snake. At first, the filmed models handled plastic snakes, then touched live snakes, and finally let a large snake crawl over their body. The phobic subjects were allowed to stop the film whenever the scenes became too threatening. Gradually, their fear of snakes was overcome. A technique called *guided participation* involves watching a live model and then participating with the model. For example, to treat a snake phobia, subjects watch through an observation window while a live model handles a snake. The subjects enter the room with the model and observe the handling of the snake at close range. Wearing gloves, subjects are coaxed into touching the middle of the snake while the model holds the head and tail. Subjects eventually come to touch the snake without gloves. Modeling has been shown to be effective even in the absence of an observable model. In *covert modeling*, subjects are instructed to imagine a model coping with a feared or threatening situation; they do not actually see a model. Covert modeling has been used to treat snake phobias and social inhibitions. You may not think that a fear of snakes is so terrible, but overcoming this fear has brought about

significant changes in many people's lives, even for those who never encounter snakes. In addition to bolstering self-esteem and self-efficacy, eliminating a snake phobia can alter personal and work habits. One subject after modeling therapy was able to wear a necklace for the first time; previously she had not been able to do so because necklaces reminded her of snakes. A realtor treated successfully for snake phobia was able to increase his income because he no longer feared visiting properties in rural areas. Many other phobics treated by modeling therapy were freed from nightmares about snakes. Phobias restrict our daily life. For example, many people who fear spiders react with rapid heartbeat, shortness of breath, and vomiting even from seeing a picture of a spider. Phobics doubt their self-efficacy in these fear-provoking situations and have little confidence in their ability to deal with the source of the phobia. To relieve people of these fears expands their environment and increases their self-efficacy.

Modeling therapy, particularly using film and video techniques, offers several practical advantages. Complex behaviors can be seen as a whole. Extraneous behaviors can be edited out so that the subject's time is spent viewing only relevant behaviors. Films can be repeated with many patients and used by several therapists simultaneously. Modeling techniques can also be used with groups, saving time and money in treating people with the same problem. The approach has been effective with phobias, obsessive-compulsive disorders, and sexual dysfunction and the positive effects have been reported to last for years. Modeling techniques have been shown to affect our ability to tolerate pain. Male college students performing a pain-inducing isometric exercise were shown a videotape of models doing the same exercise. Some of the models appeared to tolerate the pain well, while others did not. Subjects who saw the pain-tolerant models continued to exercise for a significantly longer period of time and reported significantly less discomfort than did subjects whose models seemed more adversely affected by the pain. In addition, those who viewed pain-intolerant models experienced the onset of pain sooner during the exercise period as well as an accelerated heart rate (Symbaluk, Heth, Cameron, & Pierce, 1997). Considerable research has been conducted on self-efficacy during and after behavior modification therapy. The results have shown that as the subjects' self-efficacy improved during treatment, they were increasingly able to deal with the source of the fear. It was the therapeutic procedure itself that enhanced self-efficacy.

## **Anxiety**

We noted that many behaviors can be modified through the modeling approach. We will consider two instances: fear of medical treatment and test anxiety.

**Fear of medical treatment.** Some people have such an intense fear of medical situations that they are prevented from seeking treatment. One early study dealt with children who were scheduled for surgery and had never been in a hospital before. They were divided into two groups: an experimental group that watched a film about a boy's experience in the hospital, and a control group that saw a film about a boy taking a trip (Melamed & Siegel, 1975). The child in the hospital film was an exemplary model. Despite some initial anxiety, he coped well with the doctors and the medical procedures. The children's anxiety was assessed by several techniques including direct observation of behavior, responses on self-report inventories, and physiological measures. These assessments were made the night before surgery and were repeated a few weeks later. The results showed that the modeling film had been effective in reducing anxiety. Subjects who had seen the hospital film had fewer behavior problems after hospitalization than did those in the control group. Similar procedures have been used to reduce fear of hospitalization in adults as well as fear of dental treatment. One study involved a medical procedure considered so stressful that more than 80 percent of patients initially refused to undergo it or quit it prematurely (Allen, Danforth, & Drabman, 1989). Subjects who watched a video of a model having the procedure and describing how he coped with his distress were more likely to complete the treatment with less anxiety and a shorter hospital stay.

**Test anxiety.** For some college students, test anxiety is so serious that their examination performance does not accurately reflect their knowledge of the material being tested. In the classic research, a sample of college students was divided into groups based on their personality test scores: those high in test anxiety and those low in test anxiety (Sarason, 1975). Some of the students saw a filmed model talking about her anxiety when taking tests and her ways of dealing with it. Other students saw a film of the same model who talked about test anxiety but not about coping mechanisms. Under a third condition, students watched the filmed model talking about other college activities. Then the subjects were given a list of nonsense syllables to memorize and were tested on their ability to recall them. The results showed that subjects high in test anxiety were most strongly affected by the model who talked about coping mechanisms.

They performed significantly better on the recall test than did high-anxiety subjects who had been exposed to the other two conditions.

### **Ethical Issues in Behavior Modification**

Although the results of behavior modification are impressive, the techniques have drawn criticism from educators, politicians, and even psychologists. They have suggested that behavior modification exploits people, manipulating and controlling them against their will. Bandura argues that these charges are misleading. Behavior modification does not occur without the client's awareness. Indeed, self-awareness and self-regulation are vital for the effectiveness of any program to change or relearn behaviors. In other words, behavior modification techniques will not be successful unless the person is able to understand what behaviors are being reinforced. Further, the clients themselves decide what they want to change; they are not being controlled by anyone else. People come to a therapist to eliminate specific fears and anxieties that inhibit their ability to function or to cope with daily life. Bandura notes that the client-therapist relationship is a contract between two consenting individuals, not a relationship between a sinister master-controller and a spineless puppet.

Bandura also explained that far from manipulating or enslaving, modeling techniques actually increase personal freedom. People who are afraid to leave the house or who have a compulsion to wash their hands continually are not truly free. They are living within the constraints imposed by their phobic or compulsive behavior. Those constraints allow little choice. Removing the constraints through behavior modification techniques can increase freedom and the opportunity for personal growth. Many such techniques have derived from Bandura's work and are popular alternatives to psychoanalysis and other therapeutic approaches.

## **GEORGE KELLY: PERSONAL CONSTRUCT THEORY:**

### **Personal Construct Theory**

Kelly suggested that people perceive and organize their world of experiences the same way scientists do, by formulating hypotheses about the environment and testing them against the reality of daily life. In other words, we observe the events of our life—the facts or data of our experience—and interpret them in our own way. This personal interpreting, explaining, or construing of experience is our unique view of events. It is the pattern within which we place them. Kelly said that we look at the world through “transparent patterns that fit over the realities of which the world is composed” (Kelly, 1955, pp. 8–9). We might compare these patterns to sunglasses that add a particular tint or coloring to everything we see. One person’s glasses may have a bluish tint whereas another’s may have a greenish tint. Several people can look at the same scene and perceive it differently, depending on the tint of the lenses that frame their point of view. So it is with the hypotheses or patterns we construct to make sense of our world. This special view, the unique pattern created by each individual, is what Kelly called our construct system.

**A construct** is a person’s unique way of looking at life, an intellectual hypothesis devised to explain or interpret events. We behave in accordance with the expectation that our constructs will predict and explain the reality of our world. Like scientists, we constantly test these hypotheses. We base our behavior on our constructs, and we evaluate the effects. Consider a student who is in danger of failing an introductory psychology course and is trying to persuade the professor to give a passing grade. After observing the professor for most of the semester, the student concludes that the professor behaves in a superior and authoritarian manner in class and has an inflated sense of personal importance. From this observation, the student forms the hypothesis, or construct, that acting to reinforce the professor’s exaggerated self-image will bring a favorable response. The student tests this idea against reality. The student reads an article the professor has written and praises it to the professor. If the professor feels flattered and gives the student a good grade, then the student’s construct has been confirmed. It has been found to be useful and can be applied the next time the student takes a course with that professor or with any professor who behaves similarly. However, if the student receives a failing grade, then the construct was found to be inappropriate. A new one will be required for dealing with that professor. Over the course of life, we develop many constructs, one for almost every type of person or situation we encounter. We expand our inventory of constructs as we meet new people and face new situations. Further, we may alter or discard constructs periodically as situations

change. Revising our constructs is a necessary and continuous process; we must always have an alternative construct to apply to a situation. If our constructs were inflexible and incapable of being revised (which is what would happen if personality was totally determined by childhood influences), then we would not be able to cope with new situations. Kelly called this adaptability **constructive alternativism** to express the view that we are not controlled by our constructs but we are free to revise or replace them with other alternatives.

## **Ways of Anticipating Life Events**

Kelly's personal construct theory is presented in a scientific format, organized into a fundamental postulate and 11 corollaries. The fundamental postulate states that our psychological processes are directed by the ways in which we anticipate events. By using the word processes, Kelly was not suggesting some kind of internal mental energy. Rather, he believed that personality was a flowing, moving process. Our psychological processes are directed by our constructs, by the way each of us construes our world. Another key word in the fundamental postulate is anticipate. Kelly's notion of constructs is anticipatory. We use constructs to predict the future so that we have some idea of the consequences of our actions, of what is likely to occur if we behave in a certain way.

## **The Construction Corollary**

**Similarities among repeated events.** Kelly believed no life event or experience could be reproduced exactly as it occurred the first time. An event can be repeated, but it will not be experienced in precisely the same way. For example, if you watch a movie today that you first saw last month, your experience of it will be different the second time. Your mood may not be the same, and during the elapsed month you were exposed to events that affected your attitudes and emotions. Maybe you read something unpleasant about an actor in the film. Or you may feel more content because your grades are improving. However, although such repeated events are not experienced identically, recurrent features or themes will emerge. Some aspects of a situation will be similar to those experienced earlier. It is on the basis of these similarities that we predict or establish anticipations about how we will deal with that type of event in the future. Our predictions rest on the idea that future events, though they are not duplicates of past events, will nevertheless be



similar. For example, some scenes in the movie probably affect you the same way every time. If you liked the car chase scenes the first time, you will probably like them again. You base your behavior on your anticipation of liking the chases, so that explains why you choose to watch the film again. Themes of the past reappear in the future, and we formulate our constructs on the basis of these recurring themes.

### **The Individuality Corollary**

**Individual differences in interpreting events.** With this corollary, Kelly introduced the notion of individual differences. He pointed out that people differ from one another in how they perceive or interpret an event, and because people construe events differently, they thus form different constructs. Our constructs do not so much reflect the objective reality of an event as they constitute the unique interpretation each of us places on it.

### **The Organization Corollary**

**Relationships among constructs.** We organize our individual constructs into a pattern according to our view of their interrelationships, that is, their similarities and differences. People who hold similar constructs may still differ from one another if they organize those constructs in different patterns. Typically, we organize our constructs into a hierarchy, with some constructs subordinate to others. A construct can include one or more subordinate constructs. For example, the construct *good* may include among its subordinates the constructs *intelligent* and *moral*. Thus, if we meet someone who fits our idea of a good person, we anticipate that he or she will also have the attributes of intelligence and high moral standards. The relationships among constructs are usually more enduring than the specific constructs themselves, but they, too, are open to change. A person who feels insulted by someone who appears more intelligent may switch the construct *intelligent* from a subordinate place under the construct *good* to a place under the construct *bad*. The only valid test for a construct system is its predictive efficiency. If the organization of our constructs no longer provides a useful way to predict events, we will modify it.

### **The Dichotomy Corollary**

**Two mutually exclusive alternatives.** All constructs are bipolar or dichotomous. This is necessary if we are to anticipate future events correctly. Just as we note similarities among people or events, we must also account for

dissimilarities. For example, it is not enough to have a construct about a friend that describes the personal characteristic of honesty. We must also consider the opposite, dishonesty, to explain how the honest person differs from someone who is not honest. If we did not make this distinction—if we assumed that all people are honest—then forming a construct about honesty would not help us anticipate or predict anything about people we might meet in the future. A person can be expected to be honest only in contrast to someone who is expected to be dishonest. The appropriate personal construct in this example, then, is honest versus dishonest. Our constructs must always be framed in terms of a pair of mutually exclusive alternatives.

### **The Choice Corollary**

**Freedom of choice.** The notion that people have freedom of choice is found throughout Kelly's writings. According to the dichotomy corollary described above, each construct has two opposing poles. For every situation we must choose the alternative that works best for us, the one that allows us to anticipate or predict the outcome of future events. Kelly suggested that we have some latitude in deciding between the alternatives, and he described it as a choice between security and adventure. Suppose you must decide which of two courses to take next semester. One is easy because it is not much different from a course you've already taken and is taught by a professor known to give high grades for little work. There is virtually no risk involved in choosing that course, but there may not be much reward either. You know the professor is dull, and you have already studied much of the course material. However, it is the secure choice, because you can make a highly accurate prediction about the consequences of deciding to take it. The other course is more of a gamble. The professor is new and rumored to be tough, and you don't know much about the subject. It would expose you to a field of study you've been curious about. In this case, you cannot make an accurate prediction about the outcome of your choice. This more adventurous alternative means more risk, but the potential reward and satisfaction are greater. You must choose between the low-risk, minimal-reward secure option and the high-risk, high-reward adventurous option. The first has a high predictive efficiency, the second a lower predictive efficiency. Kelly believed we face such choices throughout life, choices between defining or extending our personal construct system. The secure choice, which is similar to past choices, further defines our construct system by repeating experiences and

events. The more adventurous choice extends our construct system by encompassing new experiences and events.

The popular tendency to opt for the secure, low-risk alternative may explain why some people persist in behaving in an unrewarding way. For example, why does someone act aggressively toward other people even when continually rebuffed? Kelly's answer was that the person is making the low-risk choice because he or she has come to know what to expect from others in response to aggressive behavior. The hostile person does not know how people will react to friendliness because he or she has rarely tried it. The potential rewards may be greater for friendly behavior but so is the uncertainty for this person. Remember that our choices are made in terms of how well they allow us to anticipate or predict events, not necessarily in terms of what is best for us. And it is Kelly's contention that each of us, in the best scientific tradition, desires to predict the future with the highest possible degree of certainty.

### **The Range Collary**

**The range of convenience.** Few personal constructs are appropriate or relevant for all situations. Consider the construct tall versus short, which obviously has a limited range of convenience or applicability. It can be useful with respect to buildings, trees, or basketball players, but it is of no value in describing a pizza or the weather. Some constructs can be applied to many situations or people, whereas others are more limited, perhaps appropriate for one person or situation. The range of convenience or relevance for a construct is a matter of personal choice. For example, we may believe that the construct loyal versus disloyal applies to everyone we meet or only to our family members or to our pet dog. According to Kelly, if we are to understand personality fully, it is just as important to know what is excluded from a construct's range of convenience as it is to know what is included.

### **The Experience Corollary**

**Exposure to new experiences.** We have said that each construct is a hypothesis generated on the basis of past experience to predict or anticipate future events. Each construct is then tested against reality by determining how well it predicted a given event. Most of us are exposed to new experiences daily, so the process of testing the fit of a construct to see how well it predicted the event is ongoing. If a construct is not a valid predictor of the outcome of the situation, then it must be reformulated or replaced. Thus, we evaluate and

reinterpret our constructs as our environment changes. Constructs that worked for us at age 16 may be useless, or even harmful, at age 40. In the intervening years, our experiences will have led us to revise our construct system. If you never have any new experiences, then your construct system would never have to change. But for most of us, life involves meeting new people and coping with new challenges. Therefore, we must re-construct our experiences and constructs accordingly.

### **The Modulation Corollary**

**Adapting to new experiences.** Constructs differ in their permeability. To permeate means to penetrate or pass through something. A permeable construct is one that allows new elements to penetrate or be admitted to the range of convenience. Such a construct is open to new events and experiences and is capable of being revised or extended by them. How much our construct system can be modulated, or adjusted, as a function of new experience and learning depends on the permeability of the individual constructs. An impermeable or rigid construct is not capable of being changed, no matter what our experiences tell us. For example, if a bigoted person applies the construct high intelligence versus low intelligence in a fixed or impermeable way to people of a certain ethnic minority group, believing that all members of this group have low intelligence, then new experiences will not penetrate or alter this belief. The prejudiced person will not modify that construct, no matter how many highly intelligent people of that ethnic group he or she meets. The construct is a barrier to learning and to new ideas because it is incapable of being changed or revised.

### **The Fragmentation Corollary**

**Competition among constructs.** Kelly believed that within our construct system some individual constructs might be incompatible, even though they coexist within the overall pattern. Recall that our construct system may change as we evaluate new experiences. However, new constructs do not necessarily derive from old ones. A new construct may be compatible or consistent with an old one in a given situation, but if the situation changes, then these constructs can become inconsistent.

Consider the following situation. A man meets a woman in a psychology class and decides that he is attracted to her. She is also a psychology major, and her interests seem similar to his. She fits the friend alternative of the construct

friend versus enemy. Thus, she is someone to be liked and respected. He sees her the next day at a political rally and is disappointed to find her loudly expressing conservative views that are the opposite of his own liberal opinions. Now she also fits the opposite alternative of the construct. In that situation she has become the enemy. This inconsistency in the man's construct about this woman is at a subordinate level in his overall construct system. In one situation she is a friend, and in another situation she is an enemy. However, his broader construct, that liberals are friends and conservatives are enemies, remains undisturbed. According to Kelly, this is the process by which we tolerate subordinate inconsistencies without damaging our overall construct system.

### **The Commonality Corollary**

**Similarities among people in interpreting events.** Because people differ in the ways they construe events, each person develops unique constructs. However, people also show similarities in their ways of construing events. Kelly suggested that if several people construe an experience similarly, we can conclude that their cognitive processes are similar. Consider a group of people with the same cultural norms and ideals. Their anticipations and expectations of one another will have much in common and they will construe many of their experiences in the same way. People from the same culture may show a resemblance in their behaviours and characteristics even though they are exposed to different life events.

### **The Sociality Corollary**

**Interpersonal relationships.** We noted above that people in the same culture tend to construe events similarly. Although this accounts for some commonalities among people, it does not in itself bring about positive social relationships. It is not enough for one person to construe or interpret experiences in the same way as another person. The first person must also construe the other person's constructs. In other words, we must understand how another person thinks if we are to anticipate how that person will predict events. Construing another person's constructs is something we do routinely. Think about driving a car. We stake our lives on being able to anticipate what the other drivers on the road will do; we anticipate that they will stop at a red light and move ahead at a green light. It is only when we can predict with some certainty what drivers of SUVs, friends, bosses, or teachers will do that we can adjust our behaviors to theirs. And while we are adapting to them, they are

doing the same to us. Each person assumes a role with respect to others. We play one role with a partner, another with a child, another with our supervisor at work. Each role is a behavior pattern that evolves from understanding how the other person construes events. In a sense, then, we fit ourselves into the other person's constructs.