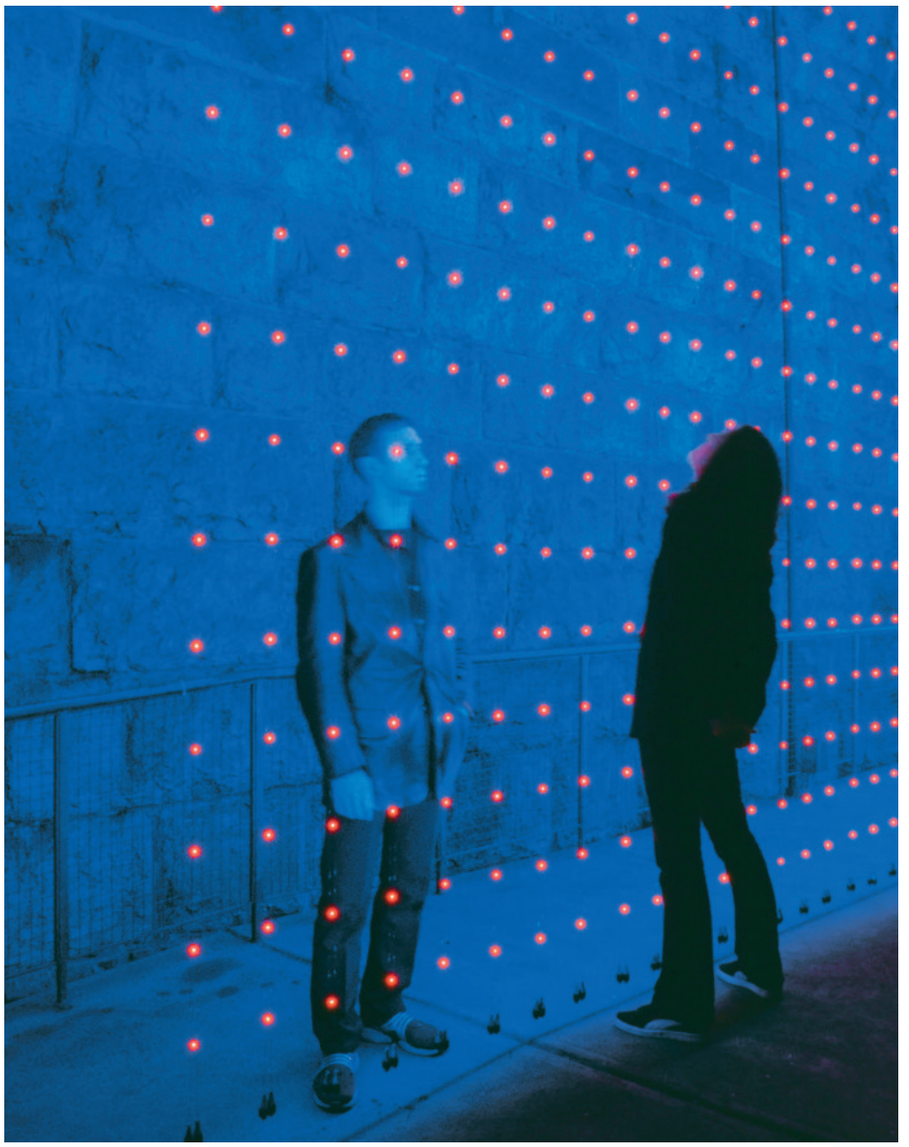
CHAPTER 2

Contemporary Perspectives on Abnormal Behavior



CHAPTER OUTLINE

Jessica's "Little Secret"

I don't want Ken (her fiancé) to find out. I don't want to bring this into the marriage. I probably should have told him, but I just couldn't do it. Every time I wanted to I just froze up. I guess I figured I'd get over this before the wedding. I have to stop bingeing and throwing up. I just can't stop myself. You know, I want to stop, but I get to thinking about the food I've eaten and it sickens me. I picture myself getting all fat and bloated and I just have to rush to the bathroom and throw it up. I would go on binges, and then throw it all up. It made me feel like I was in control, but really I wasn't.

I have this little ritual when I throw up. I go to the bathroom and run the water in the sink. Nobody ever hears me puking. It's my little secret. I make sure to clean up really well and spray some Lysol before leaving the bathroom. No one suspects I have a problem. Well, that's not quite true. The only one who suspects is my dentist. He said my teeth were beginning to decay from stomach acid. I'm only 20 and I've got rotting teeth. Isn't that awful?

. . . Now I've started throwing up even when I don't binge. Sometimes just eating dinner makes me want to puke. I've just got to get the food out of my body—fast, you know. Right after dinner, I make some excuse about needing to go to the bathroom. It's not every time but at least several times a week. After lunch sometimes, too. I know I need help. It's taken me a long time to come here, but you know I'm getting married in three months and I've got to stop.

—Jessica, a 20-year-old communications major

Source: From the Author's Files

JESSICA EXCUSES HERSELF FROM THE DINNER TABLE, GOES TO THE BATHROOM, STICKS A FINGER down her throat to gag, and throws up her dinner. Sometimes she binges first and then forces herself to throw up. You'll recall that in Chapter 1 we described the criteria that mental health professionals generally use to classify behavior patterns as abnormal. Jessica's behavior clearly meets several of these criteria. Bingeing and throwing up is a source of personal distress and is maladaptive in the sense that it can lead to serious health consequences, such as decaying teeth (see Chapter 10), and social consequences (which is why she kept it a secret and feared it would damage her forthcoming marriage). It is also statistically infrequent, although perhaps not as infrequent as you might think. Jessica was diagnosed with *bulimia*, a type of eating disorder that we discuss in Chapter 10.

How can we understand such unusual and maladaptive behavior? In this chapter we examine contemporary approaches to understanding abnormal behavior from the vantage points offered by the biological, psychological, and sociocultural perspectives. Each perspective provides a window for examining abnormal behavior, but none captures a complete view of the subject. Many scholars today believe that abnormal behavior patterns are complex phenomena that are best understood by taking into account the contributions of multiple factors representing these different perspectives, rather than from any one causal factor.

Since earliest times, humans have sought explanations for strange or deviant behavior. As we saw in Chapter 1, through the Middle Ages, most people believed that abnormal behavior was caused by demons and other supernatural forces. But even in ancient times, some scholars, such as Hippocrates and Galen, looked for natural explanations of abnormal behavior. Today, of course, superstition and demonology have given way to theoretical models from the natural and social sciences. These approaches pave the way not only for a scientifically based understanding of abnormal behavior but also for ways of treating people with psychological disorders.

TRUTH or FICTION

T❑ F❑ Recent research shows that most psychological disorders are caused by defective genes. (p. 45)

T❑ F❑ Punishment does not eliminate undesirable behavior. (p. 55)

T❑ F❑ Children may acquire a distorted self-concept that mirrors what others expect them to be, but that does not reflect who they truly are. (p. 57)

T❑ F❑ According to a leading cognitive theorist, emotional distress is caused by beliefs people hold about negative life experiences, not by the experiences themselves. (p. 59)

T❑ F❑ Black Americans have higher rates of psychological disorders than White Europeans Americans, even when we account for income differences between these groups. (p. 62)

In this chapter we examine the biological, psychological, and sociocultural perspectives on abnormal behavior. Each perspective provides a window for examining abnormal behavior, but none captures a complete view of the subject. Many scholars today believe that abnormal behavior patterns are complex phenomena that are best understood by taking into account these multiple perspectives. As we shall see in Chapter 4, the major biological and psychological perspectives on abnormal behavior give rise to different ways of treating these problems.

THE BIOLOGICAL PERSPECTIVE

The *biological perspective,* inspired by scientists and physicians since the time of Hippocrates, focuses on the biological underpinnings of abnormal behavior and the use of biologically based approaches, such as drug therapy, to treat psychological disorders. The biological perspective gave rise to the development of the *medical model*, which remains today a powerful force in contemporary understandings of abnormal behavior. People who adopt the medical model subscribe to the belief that abnormal behaviors represent symptoms of underlying disorders or diseases, called *mental illnesses*, that have biological root causes. The medical model is not synonymous with the biological perspective, however. We can speak of biological perspectives without adopting the tenets of the medical model. For example, a behavior pattern such as shyness may have a strong genetic (biological) component but not be considered a "symptom" of any underlying "disorder" or illness.

Our understanding of the biological underpinnings of abnormal behavior has grown in recent years. In Chapter 1 we focused on the methods of studying the role of heredity or genetics. Genetics plays a role in many forms of abnormal behavior, as we shall see throughout the text.

We also know that other biological factors, especially the functioning of the nervous system, are involved in the development of abnormal behavior. To better understand the role of the nervous system in abnormal behavior patterns, we first need to learn how the nervous system is organized and how nerve cells communicate with each other. In Chapter 5 we examine another body system, the *endocrine system,* and the important roles that it plays in the body's response to stress.

The Nervous System

neurons Nerve cells.

Perhaps if you did not have a nervous system, you would never feel nervous—but neither would you see, hear, or move. However, even calm people have nervous systems. The nervous system is made up of **neurons,** nerve cells that transmit signals or "messages" throughout the body. These messages allow us to sense an itch from a bug bite, coordinate our vision and muscles to ice skate, write a research paper, solve a math problem, and in the case of hallucinations, hear or see things that are not really there.

dendrites The rootlike structures at the ends of neurons that receive nerve impulses from other neurons.

axon The long, thin part of a neuron along which nerve impulses travel.

terminals The small branching structures at the tips of axons.

Every neuron has a cell body that contains the nucleus of the cell and metabolizes oxygen to carry out the work of the cell (see Figure 2.1). Short fibers called **dendrites** project from the cell body to receive messages from adjoining neurons. Each neuron has an **axon** that projects trunklike from the cell body. Axons can extend as long as several feet, if they are conveying messages between the toes and the spinal cord. Axons terminate in small branching structures that are aptly called **terminals.** Neurons convey messages in one direction, from the dendrites or cell body along the axon to the axon terminals. The messages are then conveyed from the terminals to other neurons, muscles, or glands.

neurotransmitters Chemical substances that transmit messages from one neuron to another.

Neurons transmit messages to other neurons by means of chemical substances called **neurotransmitters.** Neurotransmitters induce chemical changes in receiving neurons. These changes cause axons to conduct the messages in electrical form.

synapse The junction between one neuron and another through which nerve impulses pass.

The junction or small gap between a transmitting neuron and a receiving neuron is termed a **synapse.** The message does not jump across the synapse like a spark. Instead, axon terminals release neurotransmitters into the cleft like myriad ships casting off into the seas (Figure 2.2).

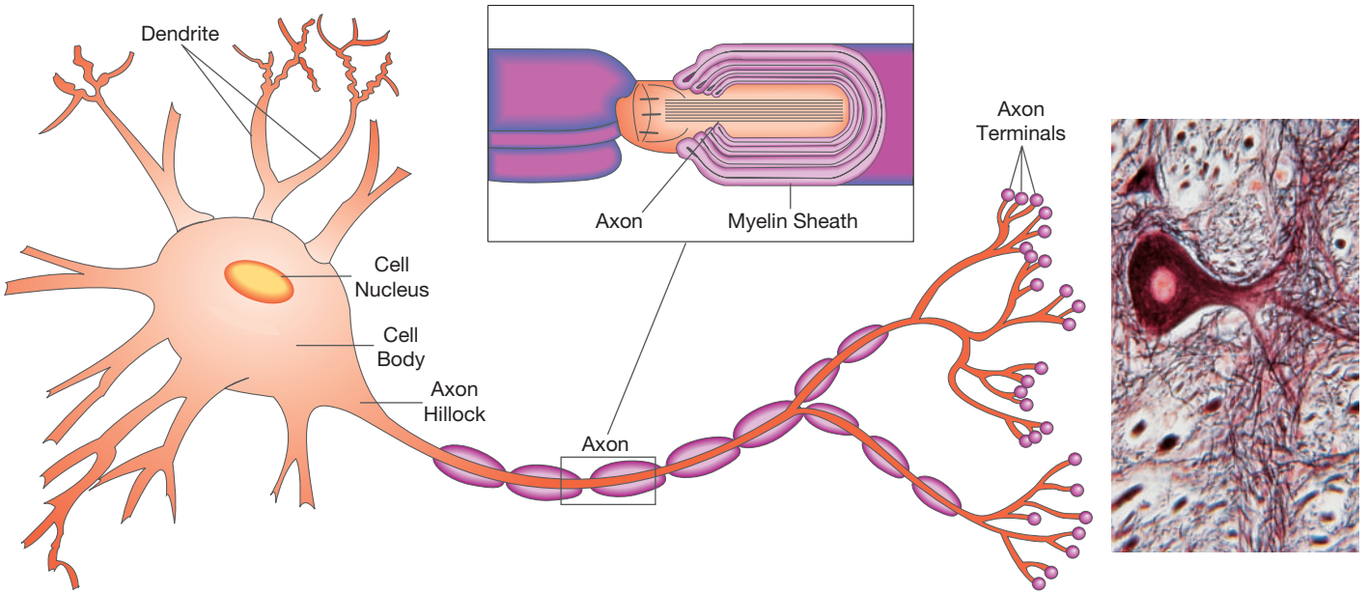


FIGURE 2.1 Anatomy of a neuron.
The three basic parts of the neuron are the cell body, the dendrites, and the axon. The axon of this neuron is wrapped in a myelin sheath, which insulates it from the bodily fluids surrounding the neuron and facilitates transmission of neural impulses (messages that travel within the neuron).

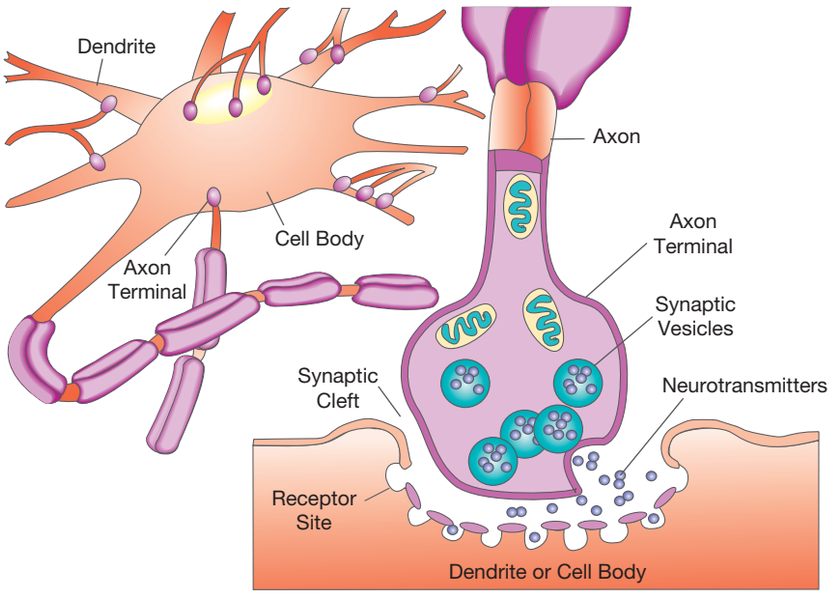


FIGURE 2.2 Transmission of neural impulses across the synapse.
The diagram here shows the structure of the neuron and the mode of transmission of neural impulses between neurons. Neurons transmit messages, or neural impulses, across synapses, which consist of the axon terminal of the transmitting neuron, the gap or synapse between the neurons, and the dendrite of the receiving neuron. The "message" is carried by neurotransmitters that are released into the synapse and taken up by receptor sites on the receiving neuron. Patterns of firing of many thousands of neurons give rise to psychological events such as thoughts and mental images. Different forms of abnormal behavior are associated with irregularities in the transmission or reception of neural messages.

TABLE 2.1

Neurotransmitter Functions and Relationships with Abnormal Behavior Patterns

Neurotransmitter	Functions	Associations with Abnormal Behavior
Acetylcholine (ACh)	Control of muscle contractions and formation of memories	Reduced levels found in patients with Alzheimer's disease (see Chapter 15)
Dopamine	Regulation of muscle contractions and mental processes involving learning, memory, and emotions	Overutilization of dopamine in the brain may be involved in the development of schizophrenia (see Chapter 12)
Norepinephrine	Mental processes involved in learning and memory	Irregularities linked with mood disorders such as depression (see Chapter 8)
Serotonin	Regulation of mood states, satiety, and sleep	Irregularities are implicated in depression and eating disorders (see Chapters 8 and 10)

receptor site A part of a dendrite on a receiving neuron that is structured to receive a neurotransmitter.

Each kind of neurotransmitter has a distinctive chemical structure. It will fit only into one kind of harbor, or **receptor site,** on the receiving neuron. Consider the analogy of a lock and key. Only the right key (neurotransmitter) operates the lock, causing the *postsynaptic* (receiving) neuron to forward the message.

When released, some molecules of a neurotransmitter reach port at receptor sites of other neurons. "Loose" neurotransmitters may be broken down in the synapse by enzymes, or be reabsorbed by the axon terminal (a process termed *reuptake*), to prevent the receiving cell from continuing to fire.

Psychiatric drugs, including drugs used to treat anxiety, depression, and schizophrenia, work by affecting the availability of neurotransmitters in the brain (Snyder, 2002). Consequently, many scientists suspect that irregularities in the workings of neurotransmitter systems in the brain play important roles in the development of these abnormal behavior patterns (see Table 2.1).

Depression is linked to chemical imbalances in the brain involving irregularities in the functioning of several neurotransmitters, especially serotonin (Bremner et al., 2003; Harmer et al., 2003; Meyer et al., 2003) (see Chapter 8). Serotonin is a key brain chemical involved in regulating moods, so it is not surprising that it would play a role in depression (Gupta, 2003). The most widely used antidepressant drugs—Prozac and Zoloft—belong to a class of drugs that increase the availability of serotonin in the brain. Serotonin is also linked to anxiety disorders, sleep disorders, and eating disorders.

Alzheimer's disease, a brain disease in which there is a progressive loss of memory and cognitive functioning, is associated with reductions in the levels of the neurotransmitter *acetylcholine* in the brain (see Chapter 15). Irregularities involving the neurotransmitter *dopamine* are implicated in the development of schizophrenia (see Chapter 12). Antipsychotic drugs used to treat schizophrenia apparently work by blocking dopamine receptors in the brain.

Although neurotransmitter systems are implicated in many psychological disorders, the precise causal mechanisms remain to be determined.

central nervous system The brain and spinal cord.

peripheral nervous system The somatic and autonomic nervous systems.

Parts of the Nervous System The nervous system consists of two major parts, the **central nervous system** and the **peripheral nervous system.** The central nervous system consists of the brain and spinal cord. The peripheral nervous system is made up of nerves that (a) receive and transmit sensory messages (messages from sense organs such as the eyes and ears) to the brain and spinal cord, and (b) transmit messages from the brain or

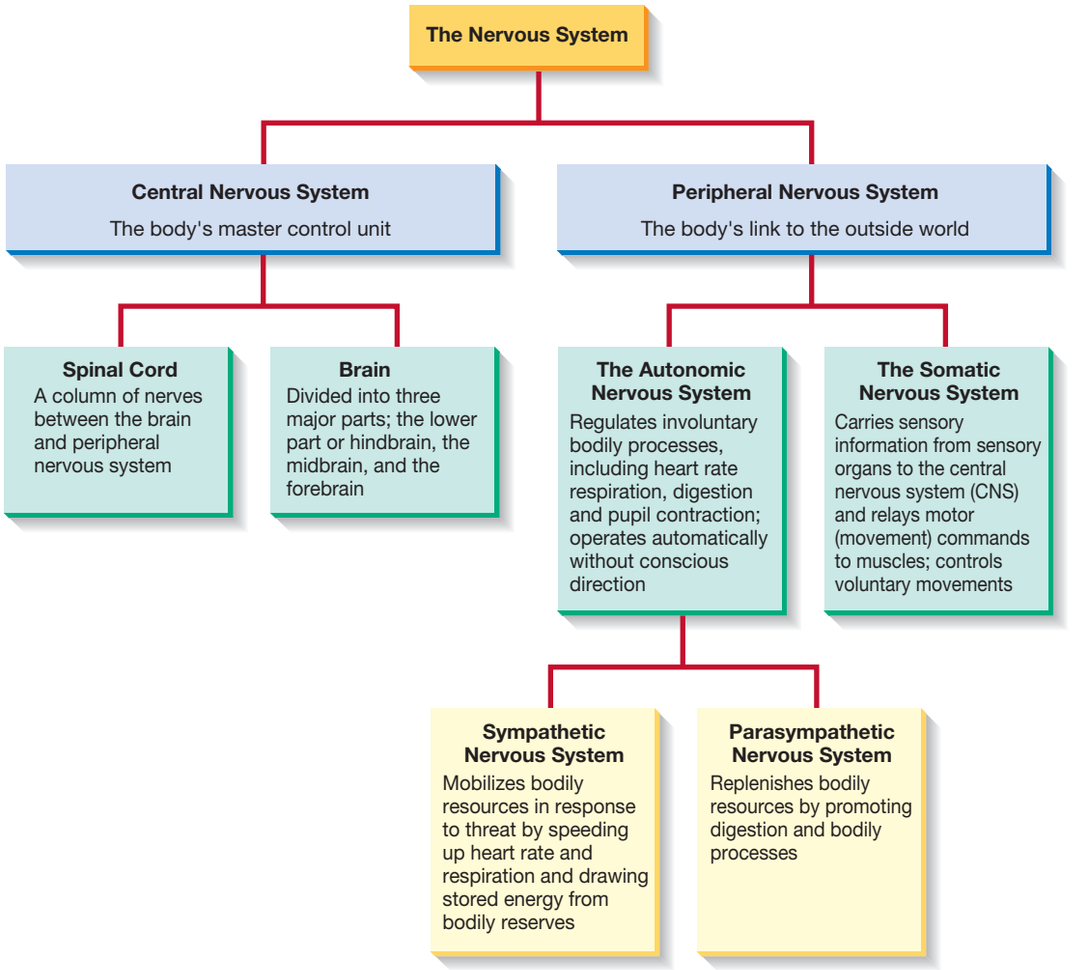


FIGURE 2.3 The organization of the nervous system.

Source: Adapted from J. S. Nevid, *Psychology: Concepts and Applications,* Second Edition (Boston: Houghton Mifflin Co., 2007), p. 56. Reprinted by permission.

spinal cord to the muscles, causing them to contract, and to glands, causing them to secrete hormones. The organization of the nervous system is represented in Figure 2.3.

Central Nervous System We begin our overview of the parts of the central nervous system with the back of the head, where the spinal cord meets the brain, and work forward (see Figure 2.4). The lower part of the brain, or hindbrain, consists of the *medulla, pons,* and *cerebellum*. The **medulla** plays roles in such vital life-support functions as heart rate, respiration, and blood pressure. The **pons** transmits information about body movement and is involved in functions related to attention, sleep, and respiration.

Behind the pons is the **cerebellum** (Latin for "little brain"). The cerebellum regulates balance and motor (muscle) behavior. Injury to the cerebellum can impair your ability to coordinate your movements, causing stumbling and loss of muscle tone.

The *midbrain* lies above the hindbrain and contains nerve pathways linking the hindbrain to the upper region of the brain, called the *forebrain*. The **reticular activating system** (RAS) starts in the hindbrain and rises through the midbrain into the lower part of the forebrain. The RAS is a weblike network of neurons (nerve cells) that play important roles in regulating sleep, attention, and states of arousal. Stimulation of the RAS heightens alertness. On the other hand, use of *depressant drugs,* such as alcohol, dampens central nervous system activity, which reduces RAS activity and can induce states of grogginess or even stupor. (Effects of depressants and other drugs are discussed further in Chapter 9.)

medulla An area of the hindbrain involved in regulation of heartbeat and respiration.

pons A structure in the hindbrain involved in respiration.

cerebellum A structure in the hindbrain involved in coordination and balance.

reticular activating system Brain structure involved in processes of attention, sleep, and arousal.

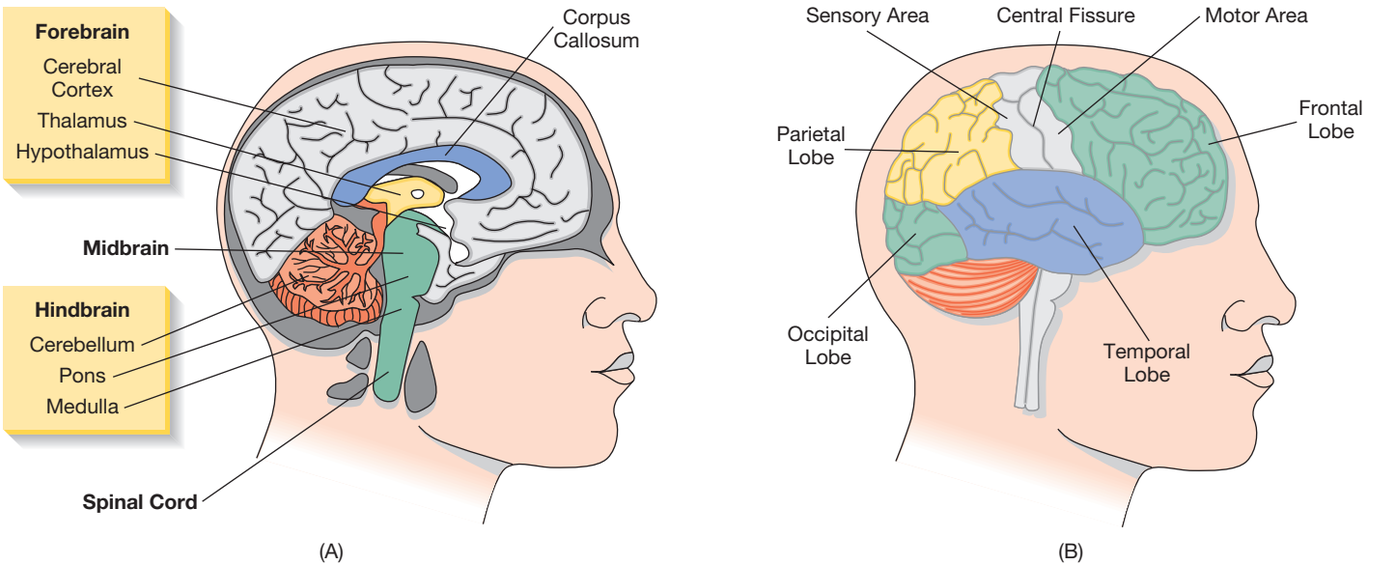


FIGURE 2.4 The geography of the brain.
Part A shows parts of the hindbrain, midbrain, and forebrain. Part B shows the four lobes of the cerebral cortex: frontal, parietal, temporal, and occipital. In B, the sensory (tactile) and motor areas lie across the central fissure from one another. Researchers are investigating the potential relationships between various patterns of abnormal behavior and irregularities in the formation or functioning of the structures of the brain.

thalamus A structure in the forebrain involved in relaying sensory information to the cortex and in processes related to sleep and attention.

hypothalamus A structure in the forebrain involved in regulating body temperature, emotion, and motivation.

limbic system A group of forebrain structures involved in learning, memory, and basic drives.

basal ganglia An assemblage of neurons located between the thalamus and cerebrum, involved in coordinating motor (movement) processes.

cerebrum The large mass of the forebrain, consisting of the two cerebral hemispheres.

cerebral cortex The wrinkled surface area of the cerebrum responsible for processing sensory stimuli and controlling higher mental functions, such as thinking and use of language.

The large frontal area of the brain, called the *forebrain,* includes such structures as the thalamus, hypothalamus, limbic system, basal ganglia, and cerebrum. The **thalamus** relays sensory information (such as tactile and visual stimulation) to the higher regions of the brain. The thalamus, in coordination with the RAS, is also involved in regulating sleep and attention.

The **hypothalamus** (hypo meaning "under") is a tiny, pea-sized structure located under the thalamus. Despite its small size (it weighs a mere four grams), the hypothalamus plays a key role in many vital bodily functions, including regulation of body temperature, concentration of fluids in the blood, and reproductive processes, as well as emotional and motivational states. By implanting electrodes in parts of the hypothalamus of animals and observing the effects when a current is switched on, researchers have found that the hypothalamus is involved in a range of motivational drives and behaviors, including hunger, thirst, sex, parenting behaviors, and aggression.

The hypothalamus, together with parts of the thalamus and other nearby interconnected structures, make up the brain's **limbic system.** The limbic system plays important roles in emotional processing and memory. It also serves important functions regulating more basic drives involving hunger, thirst, and aggression. The **basal ganglia** lie in front of the thalamus and are involved in regulating postural movements and coordination.

The **cerebrum** is the brain's crowning glory. It is responsible for higher mental functions, such as thinking and problem solving, and also accounts for the delightfully rounded shape of the human head. The surface of the cerebrum is convoluted with ridges and valleys. This surface area is called the **cerebral cortex.** It is the thinking, planning, and executive center of the brain, as well as the seat of consciousness and the sense of self.

Structural or functional abnormalities of brain structures are involved in various forms of abnormal behavior. For example, investigators find abnormalities in parts of the cerebral cortex and limbic system in schizophrenia patients (discussed in Chapter 12). The hypothalamus is implicated in certain types of sleep disorders (see Chapter 10), and deterioration of the basal ganglia is associated with Huntington's disease, a degenerative disease that can lead to disturbances of mood and paranoia and even to dementia (see Chapter 15). These are but a few of the brain-behavior relationships we shall discuss in later sections of this text.

Peripheral Nervous System The peripheral nervous system is a network of neurons connecting the brain to our sense organs—our eyes, ears, and so on—as well as our glands and muscles. These neural pathways allows us to both sense the world around us and act upon it by using our muscles to move our limbs. The peripheral nervous system consists of two main parts or divisions, called the *somatic nervous system* and the *autonomic nervous system* (see Figure 2.3).

The **somatic nervous system** transmits messages from our sensory organs to the brain for processing, leading to the experience of visual, auditory, tactile, and other sensations. Commands emanating from the brain pass downward through the spinal cord to nerves of the somatic nervous system that connect to our muscles, allowing us to voluntarily control our movements, such as when raising an arm or walking.

somatic nervous system The division of the peripheral nervous system that relays information from the sense organs to the brain and transmits messages from the brain to the skeletal muscles.

Psychologists are especially interested in the workings of the **autonomic nervous system** (ANS) because of its role in emotional processing. *Autonomic* means "automatic." The ANS regulates the glands and involuntary processes such as heart rate, breathing, digestion, and dilation of the pupils of the eyes, even when we are sleeping.

autonomic nervous system The division of the peripheral nervous system that regulates the activities of the glands and involuntary functions.

The ANS has two branches, the **sympathetic nervous system** and the **parasympathetic nervous system.** These have mostly opposing effects. Many organs and glands are served by both branches of the ANS. The sympathetic division is most involved in processes that mobilize the body's resources in times of stress, such as drawing energy from stored reserves to prepare the person to deal with imposing threats or dangers (see Chapter 5). When we face a threatening or dangerous situation, the sympathetic branch of the ANS kicks in by accelerating our heart rate and breathing rate and thereby preparing our body to either fight or flee from a threatening stressor. Sympathetic activation in the face of a threatening stimulus is associated with emotional responses such as fear or anxiety. When we relax, the parasympathetic branch decelerates the heart rate. The parasympathetic division is most active during processes that replenish energy reserves, such as digestion. Because the sympathetic branch dominates when we are fearful or anxious, fear or anxiety can lead to indigestion because activation of the sympathetic nervous system curbs digestive activity.

sympathetic nervous system Pertaining to the division of the autonomic nervous system whose activity leads to heightened states of arousal.

parasympathetic nervous system Pertaining to the division of the autonomic nervous system whose activity reduces states of arousal and regulates bodily processes that replenish energy reserves.

The Cerebral Cortex The parts of the brain responsible for higher mental functions, such as thought and use of language, are the two large masses of the cerebrum called the right and left *cerebral hemispheres*. The outer layer or covering of each hemisphere is called the cerebral cortex. (The word *cortex* literally means "bark" and is so used because the cerebral cortex can be likened to the bark of a tree.) Each hemisphere is divided into four parts, called *lobes,* as shown in Figure 2.4. The *occipital lobe* is primarily involved in processing visual stimuli; the *temporal lobe* is involved in processing sounds or auditory stimuli. The *parietal lobe* is involved in processing sensations of touch, temperature, and pain. The *sensory area* of the parietal lobe receives messages from receptors in the skin all over the body. Neurons in the motor area (or *motor cortex*) of the *frontal lobe* control muscular responses, enabling us to move our limbs. The *prefrontal cortex* (the part of the frontal lobe that lies in front of the motor cortex) regulates higher mental functions such as thinking, problem solving, and use of language.

Evaluating Biological Perspectives on Abnormal Behavior

Biological structures and processes are involved in many patterns of abnormal behavior, as we will see in later chapters. Genetic factors, as well as disturbances in neurotransmitter functioning and underlying brain abnormalities or defects, are implicated in many psychological disorders. For some disorders, such as Alzheimer's disease, biological processes play the direct causative role. (Even then, however, the precise causes remain unknown.) But for most disorders, we need to examine the interaction of biological and environmental factors.

Genes play important roles in determining our vulnerability or susceptibility to psychological disorders. But genes do not tell the whole story when it comes to understanding the origins of these disorders (Kendler, 2005; Plomin et al., 2003). Scientists today are moving past the old "nature–nurture" (gene vs. environment) debate to

CONTROVERSIES IN ABNORMAL PSYCHOLOGY

Is It All in the Genes?

It's not stretching a point to say that progress in genetic research in recent years has been nothing less than remarkable. The highlight of these achievements was the cracking of the human genome, the complete genetic blueprint of a human being. The genome consists of the precise chemical sequence in human DNA—a recipe for determining the features or traits of human beings (International Human Genome, 2001; Wade, 2003b). We are now able to read the coded instructions that comprise the genetic script of a human being. The genome has even been published on the Internet for scientists to use in their studies (Baltimore, 2000).

We each possess a unique genetic code and buried within that code are sequences of DNA that are believed to play important roles in determining our risks of developing many physical and mental disorders (Kendler, 2005). Evidence connects genetic factors to a wide range of psychological disorders, including schizophrenia, bipolar (manic–depressive) disorder, major depression, alcoholism, autism, dementia due to Alzheimer's disease, anxiety disorders, dyslexia, and antisocial personality disorder (Merikangas & Risch, 2003; NIMH, 2003; Plomin & McGuffin, 2003; Waterworth et al., 2002).

Just what it is we inherit that puts us at greater risk of developing psychological disorders is a question that continues to challenge researchers. We shouldn't think there is any one-to-one relationship between individual genes and the complex patterns of behavior we recognize as schizophrenia, bipolar disorder, or any other psychological disorders. No, there doesn't appear to be any one gene that causes schizophrenia or any other psychological disorder. Rather, multiple genes interact in complex ways, affecting underlying processes involved in brain chemistry and brain structures, which in turn affect the likelihood of developing psychological disorders.

Scientists are seeking to find particular genes involved in psychological disorders such as schizophrenia, depression, and autism (Bunney et al., 2003; Plomin, 2003; Plomin et al., 2003; Tecott, 2003). They hope that one day in the not-too-distant future, it will be possible to repair defective or harmful genes, perhaps by blocking their actions, as well as to enhance the actions of beneficial genes (Phillips et al., 2002; Plomin & McGuffin, 2003; Sapolsky, 2003).

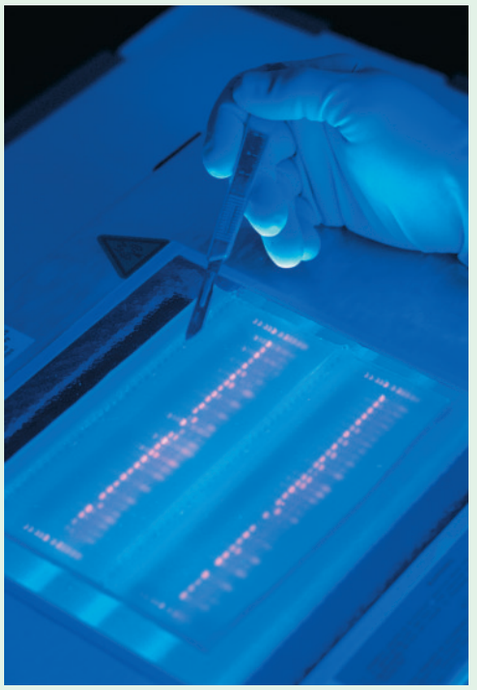
Against the backdrop of increasing evidence of genetic contributions across a wide swath of abnormal behavior, the question remains, "Is it all in the genes?" More specifically, is the development of psychological disorders a matter of luck in the genetic draw?

These questions touch on a long-standing debate in psychology, arguably the longest debate—the so-called "nature versus nurture" debate. The debate has shifted to one pitting nature against nurture to one framed in terms of how much of our behavior is a product of nature (genes) and how much is a product of nurture (environment). As the long debate continues, let us offer a few key points to consider:

1. *Genes do not dictate behavioral outcomes.* Evidence of a genetic contribution in psychological disorders is arguably strongest in the case of schizophrenia. But as discussed in Chapter 12, even for monozygotic twins who share 100% genetic overlap, when scientists find one schizophrenic MZ twin, the chance of the other twin having schizophrenia is slightly less than 50%. In other words, genetics alone does not account for schizophrenia or any other psychological disorder. As Kenneth Kendler, a leading genetics researcher, explained it, "We do not have and are not likely to ever discover 'genes' for psychiatric illness" (Kendler, 2005, p. 1250).
2. *Genetic factors create a predisposition or likelihood—not a certainty—that certain behaviors or disorders will develop.* Genes do not directly cause psychological disorders. Rather, they create predispositions that raise the risk or likelihood of developing particular disorders. Our genes are carried in our chromosomes from the moment of conception and are not affected directly by the environment. However, the effects that genes have on the body and mind may be influenced by many environmental factors such as life experiences, family relationships, and levels of life stress (Fraga et al., 2005; Kendler, 2005; Moffitt, Caspi, & Rutter, 2006). Even our ethnicity and gender influence how our genes operate in the body (Williams et al., 2003).
3. *Multigenic determinism affects psychological disorders.* We noted that for disorders in which genetic factors play a role, multiple genes are involved, not individual genes alone (Plomin, 2003; Uhl & Grow, 2004). We have yet to find any psychological disorder that can be explained by defects or variations on a single gene (USDHHS, 1999a).
4. *Genetic factors and environmental influence interact with each other in shaping our personalities and determining our vulnerability to a range of psychological disorders.* The contemporary view of the nature–nurture debate is best expressed in terms of nature *and* nurture acting together, not nature *versus* nurture (Angier, 2003 Andreasen, 2003; Plomin et al., 2003; Ridley, 2003).

Critical Thinking

- How might investigators determine the role of genetic factors in the development of psychological disorders? (Consider the research methods discussed in Chapter 1.)
- What would you say to someone who believes that genetics is destiny when it comes to determining one's risk of developing psychological disorders such as depression or schizophrenia?



A human being, decoded.
Here we see a portion of the human genome, the genetic code of a human being. Scientists recognize that genes play an important role in determining predispositions for many psychological traits and disorders. But whether these predispositions are expressed depends on the interactions of genetic and environmental influences.

study the complex interactions between genes and environmental factors to better understand the determinants of abnormal behavior patterns (Andreasen, 2003; Fraga et al., 2003; Kendler, 2005). (See *Controversies in Abnormal Psychology* on page 44.)

Although we continue to learn more about the biological foundations of abnormal behavior patterns, the interface between biology and behavior is a two-way street. Researchers have uncovered links between psychological factors and many physical disorders and conditions (see Chapter 5). Researchers are also investigating whether the combination of psychological and drug treatments for such problems as depression, anxiety disorders, and substance abuse disorders, among others, may increase the therapeutic benefits of either of the two approaches alone.

TRUTH or FICTION

Recent research shows that most psychological disorders are caused by defective genes.

☑ **FALSE.** Genes do not directly cause psychological disorders. Rather, where genes play a role, they create a greater likelihood, not a certainty, that a disorder will develop. Environmental factors also play an important role.

THE PSYCHOLOGICAL PERSPECTIVE

At about the time that biological models of abnormal behavior were becoming prominent in the late 19th century with the contributions of Kraepelin, Griesinger, and others, another approach to understanding abnormal behavior began to emerge. This approach emphasized the psychological roots of abnormal behavior and was most closely identified with the work of the Austrian physician Sigmund Freud. Over time other psychological models would emerge from the behaviorist, humanistic, and cognitivist traditions. Let us begin our study of psychological perspectives with Freud's contribution and the development of psychodynamic models.

Psychodynamic Models

Psychodynamic theory is based on the contributions of Sigmund Freud and his followers. Freud's **psychoanalytic theory** is based on the belief that the roots of psychological problems, such as hysteria, involve unconscious motives and conflicts that can be traced back to childhood. Freud put the study of the unconscious mind on the map (Lothane, 2006). To Freud, unconscious motives and conflicts revolve around primitive sexual and aggressive instincts and the need to keep these primitive impulses out of consciousness. But why must the mind keep impulses hidden from consciousness awareness? Because, in the Freudian view, were we to become fully aware of our most basic sexual and aggressive urges—which, according to Freud, include incestuous and violent impulses—our conscious self would be flooded with crippling anxiety. On the Freudian account, abnormal behavior patterns represent "symptoms" of these dynamic struggles taking place within the unconscious mind. In the case of hysteria, the "symptom" represents the *conversion* of an unconscious psychological conflict into a physical problem. The patient is aware of the symptom, but not the unconscious conflict that lies at its root. Let's take a closer look at the key elements in psychoanalytic theory.

psychoanalytic theory The theoretical model of personality developed by Sigmund Freud; also called psychoanalysis.

conscious To Freud, the part of the mind that corresponds to our present awareness.

preconscious To Freud, the part of the mind whose contents lie outside present awareness but can be brought into awareness by focusing attention.

unconscious To Freud, the part of the mind that lies outside the range of ordinary awareness and that contains instinctual urges.

The Structure of the Mind We can liken Freud's model of the mind to an iceberg with only the tip visible above the surface of awareness (Figure 2.5). Freud called this region "above the surface" the **conscious** part of the mind. It is the part of the mind that corresponds to our present awareness. The larger part of the mind remains below the surface of consciousness. The regions that lie beneath the surface of awareness were labeled the *preconscious* and the *unconscious.*

In the **preconscious** are memories that are not in awareness, but that can be brought into awareness by focusing on them. Your telephone number, for example, remains in the preconscious until you focus on it. The **unconscious,** the largest part of the mind, remains shrouded in mystery. Its contents can only be brought to awareness with great difficulty, if at all. Freud believed the unconscious is the repository of our basic biological impulses or drives, which he called instincts—primarily sexual and aggressive instincts.

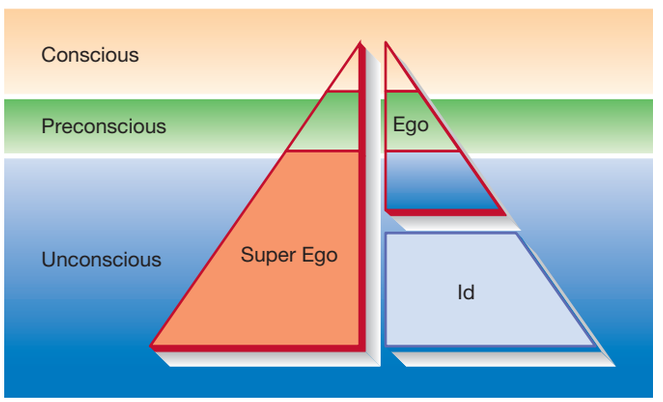


FIGURE 2.5 The parts of the mind, according to Freud.
In psychodynamic theory, the mind is akin to an iceberg; only a small part of it rises to conscious awareness at any moment in time. Although material in the preconscious mind may be brought into consciousness by focusing our attention on it, the impulses and ideas in the unconscious tend to remain veiled in mystery.

The Structure of Personality According to Freud's structural hypothesis, the personality is divided into three mental entities, or psychic structures: the *id, ego,* and *superego.*

id The unconscious psychic structure, present at birth, that contains primitive instincts and is regulated by the pleasure principle.

The **id** is the original psychic structure, present at birth. It is the repository of our baser drives and instinctual impulses, including hunger, thirst, sex, and aggression. The id, which operates completely in the unconscious, follows the **pleasure principle:** It demands instant gratification of instincts without consideration of social rules or customs or the needs of others.

pleasure principle The governing principle of the id, involving demands for immediate gratification of needs.

During the first year of life, the child discovers that every demand is not instantly gratified. He or she must learn to cope with the delay of gratification. The **ego** develops during this first year to organize reasonable ways of coping with frustration. Standing for "reason and good sense" (Freud, 1933/1964, p. 76), the ego seeks to curb the demands of the id and to direct behavior in keeping with social customs and expectations. Gratification can thus be achieved, but not at the expense of social disapproval. Let's say the id floods your consciousness with hunger pangs. Were it to have its way, the id might prompt you to wolf down whatever food is at hand or even to swipe someone else's plate. But the ego creates the idea of walking to the refrigerator, making a sandwich, and pouring a glass of milk.

ego The psychic structure that corresponds to the concept of the self, governed by the reality principle and characterized by the ability to tolerate frustration.

The ego is governed by the **reality principle.** It considers what is practical and possible, as well as the urgings of the id. The ego lays the groundwork for developing a conscious sense of ourselves as distinct individuals.

reality principle The governing principle of the ego, which involves considerations of social acceptability and practicality.

During middle childhood, the **superego** develops from the internalization of the moral standards and values of our parents and other key people in our lives. The superego serves as a conscience, or internal moral guardian, that monitors the ego and passes judgment on right and wrong. It metes out punishment in the form of guilt and shame when it finds that the ego has failed to adhere to the superego's moral standards. Ego stands between the id and the superego. It endeavors to satisfy the cravings of the id without offending the moral standards of the superego.

superego The psychic structure that incorporates the values of the parents and important others and functions as a moral conscience.

Defense Mechanisms Although part of the ego rises to consciousness, some of its activity is carried out unconsciously. In the unconscious, the ego serves as a kind of watchdog, or censor, which screens impulses from the id. It uses **defense mechanisms** (psychological defenses) to prevent socially unacceptable impulses from rising into consciousness. If not for these defense mechanisms, the darkest sins of our childhoods, the primitive demands of our ids, and the censures of our superegos might disable us psychologically. *Repression,* or motivated forgetting by which unacceptable wishes, urges, and impulses are banished to the unconscious, is the most basic of the defense mechanisms (Boag, 2006). Others are described in Table 2.2.

defense mechanisms The reality-distorting strategies used by the ego to shield the self from awareness of anxiety-provoking materials.

A dynamic unconscious struggle thus takes place between the id and the ego. Biological drives that are striving for expression (the id) are pitted against the ego, which seeks to restrain them or channel them into socially acceptable outlets. When these conflicts are not resolved smoothly, they can lead to the development of features associated with psychological disorders, such as hysterical symptoms, phobias, and behavioral problems. Because we cannot view the unconscious mind directly, Freud developed a method of mental detective work called *psychoanalysis,* which is described in Chapter 4.

The use of defense mechanisms to cope with feelings such as anxiety, guilt, and shame is considered normal. These mechanisms enable us to constrain impulses from the id as we go about our daily business. Freud believed that slips of the tongue and ordinary forgetfulness could represent hidden motives that are kept out of consciousness by repression. If a friend means to say, "I hear what you're saying," but it comes out, "I hate what you're saying," perhaps the friend is expressing a repressed hateful impulse. If a lover storms out in anger but forgets his umbrella, perhaps he is unconsciously creating an excuse for returning. Defense mechanisms may also give rise to abnormal behavior, however. The person who regresses to an infantile state under pressures of enormous stress is clearly not acting adaptively to the situation.

TABLE 2.2

Major Defense Mechanisms in Psychodynamic Theory

Type of Defense Mechanism	Description	Example
Repression	Expulsion from awareness of unacceptable ideas or motives	A person remains unaware of harboring hateful or destructive impulses toward others.
Regression	The return of behavior that is typical of earlier stages of development	Under stress, a college student starts biting his nails or becomes totally dependent on others.
Displacement	The transfer of unacceptable impulses away from their original objects onto safer or less-threatening objects	A worker slams a door after his boss chews him out.
Denial	Refusal to recognize a threatening impulse or desire	A person who nearly chokes someone to death acts afterward like it was "no big deal."
Reaction formation	Behaving in a way that is the opposite of one's true wishes or desires to keep these repressed	A sexually frustrated person goes on a personal crusade to stamp out pornography.
Rationalization	The use of self-justifications to explain away unacceptable behavior	When asked why she continues to smoke, a woman says, "Cancer doesn't run in my family."
Projection	Imposing one's own impulses or wishes onto another person	A sexually inhibited person misinterprets other people's friendly approaches as sexual advances.
Sublimation	The channeling of unacceptable impulses into socially constructive pursuits	A person channels aggressive impulses into competitive sports.

Source: From J. S. Nevid, *Psychology: Concepts and Applications,* Second Edition (Boston: Houghton Mifflin Co., 2007), p. 466. Reprinted with permission.

Regression? In Freudian theory, the ego may shield itself from anxiety or extreme stress by employing the defense mechanism of regression, which involves the return of behavior associated with an earlier stage of psychological development.

Stages of Psychosexual Development Freud argued that sexual drives are the dominant factors in the development of personality, even in childhood. Freud believed that the child's basic relationship to the world in its first several years of life is organized around the pursuit of sensual or sexual pleasure. In Freud's view, all activities that are physically pleasurable, such as eating or moving one's bowels, are in essence "sexual." (What Freud meant by *sexual* is probably closer in present-day meaning to the word *sensual.*)

The drive for sexual pleasure represents, in Freud's view, the expression of a major life instinct, which he called Eros—the basic drive to preserve and perpetuate life. He called the energy contained in Eros that allows it to fulfill its function *libido,* or sexual energy. Freud believed libidinal energy is expressed through sexual pleasure in different body parts, called *erogenous zones,* as the child matures. In Freud's view, the stages of human development are psychosexual in nature because they correspond to the transfer of libidinal energy from one erogenous zone to another. Freud proposed the existence of five psychosexual stages of development: oral (first year of life), anal

The oral stage of psychosexual development? According to Freud, the child's early encounters with the world are largely experienced through the mouth.

An Oral Fixation? Freud believed that too little or too much gratification at a particular stage of psychosexual development can lead to fixation, resulting in personality traits associated with that stage, such as exaggerated oral traits.

(second year of life), phallic (beginning during the third year of life), latency (from around age 6 to age 12), and genital (beginning in puberty).

In the first year of life, the *oral stage,* infants achieve sexual pleasure by sucking their mothers' breasts and by mouthing anything that happens to be nearby. Oral stimulation, in the form of sucking and biting, is a source of both sexual gratification and nourishment. During the *anal stage* of psychosexual development, the child experiences sexual gratification through contraction and relaxation of the sphincter muscles that control elimination of bodily waste.

The next stage of psychosexual development, the *phallic stage,* generally begins during the third year of life. The major erogenous zone during the stage is the phallic region (the penis in boys, the clitoris in girls). Perhaps the most controversial of Freud's beliefs was his suggestion that phallic-stage children develop unconscious incestuous wishes for the parent of the opposite gender and begin to view the parent of the same sex as a rival. Freud dubbed this conflict the *Oedipus complex,* after the legendary Greek king Oedipus, who unwittingly slew his father and married his mother. The female version of the Oedipus complex has been named by some followers (although not by Freud himself) the *Electra complex,* after the character of Electra, who, according to Greek legend, avenged the death of her father, King Agamemnon, by slaying her father's murderers—her own mother and her mother's lover. Freud believed the Oedipus conflict represents a central psychological conflict of early childhood and that failure to successfully resolve the conflict can set the stage for the development of psychological problems in later life.

Successful resolution of the Oedipus complex involves the boy repressing his incestuous wishes for his mother and identifying with his father. This identification leads to development of the aggressive, independent characteristics associated with the traditional masculine gender role. Successful resolution of the complex for the girl involves repression of the incestuous wishes for her father and identification with her mother, leading to the acquisition of the more passive, dependent characteristics traditionally associated with the feminine sex role.

The Oedipus complex comes to a point of resolution, whether fully resolved or not, by about the age of 5 or 6. From the identification with the parent of the same gender comes the internalization of parental values in the form of the superego. Children then enter the *latency stage* of psychosexual development, a period of late childhood during which sexual impulses remain in a latent state. Interests become directed toward school and play activities.

Sexual drives are once again aroused with the *genital stage,* beginning with puberty, which reaches fruition in mature sexuality, marriage, and the bearing of children. The sexual feelings toward the parent of the opposite gender that had remained repressed during the latency period emerge during adolescence but are displaced, or transferred, onto socially appropriate members of the opposite gender. In Freud's view, successful adjustment during the genital stage involves attaining sexual gratification through sexual intercourse with someone of the opposite gender, presumably within the context of marriage.

One of Freud's central beliefs is that the child may encounter conflict during each of the psychosexual stages of development. Conflict in the oral stage, for example, centers on whether or not the infant receives adequate oral gratification. Too much gratification could lead the infant to expect that everything in life is given with little or no effort on his or her part. In contrast, early weaning might lead to frustration. Too little or too much gratification at any stage could lead to **fixation** in that stage, which leads to the development of personality traits characteristic of that stage. Oral fixations could include an exaggerated desire for "oral activities," which could become expressed in later life in smoking, alcohol abuse, overeating, and nail biting. Like the infant who depends on the mother's breast for survival and gratification of oral pleasure, orally fixated adults may also become clinging and dependent in their interpersonal relationships. In Freud's view, failure to successfully resolve the conflicts of the phallic stage (i.e., the Oedipus complex) can lead to the rejection of the traditional masculine or feminine roles and to homosexuality.

Other Psychodynamic Theorists Psychodynamic theory has been shaped over the years by the contributions of psychodynamic theorists who shared certain central tenets in common with Freud, such as that behavior reflects unconscious motivation, inner conflict, and the operation of defensive responses to anxiety. However, many psychodynamic theorists deviated sharply from Freud's positions on many issues. For example, they tended to place less emphasis than Freud on basic instincts such as sex and aggression, and greater emphasis on conscious choice, self-direction, and creativity.

fixation In Freudian theory, a constellation of personality traits associated with a particular stage of psychosexual development, resulting from either too much or too little gratification at the stage.

Swiss psychiatrist Carl Jung (1875–1961) was a member of Freud's inner circle. His break with Freud came when he developed his own psychodynamic theory, which he called *analytical psychology.* Jung believed that an understanding of human behavior must incorporate the facts of self-awareness and self-direction as well as the impulses of the id and the mechanisms of defense. He believed that not only do we have a *personal* unconscious, a repository of repressed memories and impulses, but we also inherit a collective unconscious. The collective unconscious contains primitive images, or **archetypes,** which reflect on the history of our species, including vague, mysterious mythical images like the all-powerful God, the fertile and nurturing mother, the young hero, the wise old man, and themes of rebirth or resurrection. Although archetypes remain unconscious, in Jung's view, they influence our thoughts, dreams, and emotions and render us responsive to cultural themes in stories and films. Alfred Adler (1870–1937), like Jung, held a place in Freud's inner circle, but broke away as he developed his own beliefs that people are basically driven by an inferiority complex, not by the sexual instinct, as Freud maintained. For some people, feelings of inferiority are based on physical deficits and the resulting need to compensate for them. But all of us, because of our small size during childhood, encounter feelings of inferiority to some degree. These feelings lead to a powerful drive for superiority, which motivates us to achieve prominence and social dominance. In the healthy personality, however, strivings for dominance are tempered by devotion to helping other people.

archetypes Primitive images or concepts that reside in the collective unconscious.

ego psychology Modern psychodynamic approach that focuses more on the conscious strivings of the ego than on the hypothesized unconscious functions of the id.

Adler, like Jung, believed self-awareness plays a major role in the formation of personality. Adler spoke of a *creative self,* a self-aware aspect of personality that strives to overcome obstacles and develop the individual's potential. With the hypothesis of the creative self, Adler shifted the emphasis of psychodynamic theory from the id to the ego. Because our potentials are uniquely individual, Adler's views have been termed *individual psychology.*

Some psychodynamic theorists, such as Karen Horney (1885–1952) (pronounced HORN-eye), stressed the importance of child–parent relationships in the development of emotional problems. She maintained that when parents are harsh or uncaring, children come to develop a deep-seated form of anxiety called *basic anxiety,* which she described as a feeling of "being isolated and helpless in a potentially hostile world" (cited in Quinn, 1987, p. 41). Children who harbor deep-seated resentment toward their parents may develop a form of hostility she labeled *basic hostility.* She shared with Freud the view that children repress their hostility toward their parents because of an underlying fear of losing them or of suffering reprisals or punishment from them. However, repressed hostility generates more anxiety and insecurity. With Horney and other psychodynamic theorists who followed Freud, the emphasis shifts from a focus on sexual and aggressive drives toward a closer examination of social influences on development.

More recent psychodynamic models also place a greater emphasis on the self or the ego and less emphasis on the sexual instinct than Freud. Today, most psychoanalysts see people as motivated on two tiers: by the growth-oriented, conscious pursuits of the ego as well as by the more primitive, conflict-ridden drives of the id. Heinz Hartmann (1894–1970) was one of the originators of **ego psychology,** which posits that the ego has energy and motives of its own. The choices to seek an education, dedicate oneself to art and poetry, and further humanity are not merely defensive forms of sublimation, as Freud had seen them.

Erik Erikson (1902–1994) was influenced by Freud but became an important theorist in this own right. He focused on psychosocial development in contrast to Freud's emphasis on psychosexual development. Erikson attributed more importance to social

The power of archetypes. One reason adventure stories such as *Lord of the Rings* and the *Star Wars* saga are so compelling may be that they feature archetypes such as the struggle between good and evil characters.

Karen Horney

Erik Erikson

Margaret Mahler

relationships and formation of personal identity than unconscious processes. Whereas Freud's developmental theory ends with the genital stage, beginning in early adolescence, Erikson's developmental theory posits that our personalities continue to be shaped throughout adulthood as we deal with psychosocial challenges or crises we face during each period of life. In Erikson's view, for example, the major psychosocial challenge faced by adolescents is development of *ego identity,* a clearly defined sense of who they are and what they believe in.

object-relations theory The psychodynamic viewpoint that focuses on the influences of internalized representations of the personalities of parents and other strong attachment figures (called "objects").

One popular contemporary psychodynamic approach, **object-relations theory,** focuses on how children come to develop symbolic representations of important others in their lives, especially their parents. The object-relations theorist Margaret Mahler (1897–1985) saw the process of separating from the mother during the first 3 years of life as crucial to personality development (discussed further in Chapter 13).

According to psychodynamic theory, we introject, or incorporate, into our own personalities parts of parental figures in our lives. For example, you might introject your father's strong sense of responsibility or your mother's eagerness to please others. Introjection is more powerful when we fear losing others because of death or rejection. Thus we might be particularly apt to incorporate elements of people who *disapprove* of us or who see things differently.

In Mahler's view, these symbolic representations, which are formed from images and memories of others, come to influence our perceptions and behavior. We experience internal conflict as the attitudes of introjected people battle with our own. Some of our perceptions may be distorted or seem unreal to us. Some of our impulses and behavior may seem unlike us, as if they come out of the blue. With such conflict, we may not be able to tell where the influences of other people end and our "real selves" begin. The aim of Mahler's therapeutic approach was to help clients separate their own ideas and feelings from those of the introjected objects so they could develop as individuals—as their own persons.

Psychodynamic Views on Normality and Abnormality In the Freudian model, mental health is a function of the dynamic balance among the psychic structures of id, ego, and superego (USDHHS, 1999a). In mentally healthy people, the ego is strong enough to control the instincts of the id and to withstand the condemnation of the superego. The presence of acceptable outlets for the expression of some primitive impulses, such as the expression of mature sexuality in marriage, decreases the pressures within the id and, at the same time, lessens the burdens of the ego in repressing the remaining impulses. Being reared by reasonably tolerant parents might prevent the superego from becoming overly harsh and condemnatory.

In people with psychological disorders, the balance among the psychic structures is lopsided. Some unconscious impulses may "leak," producing anxiety or leading to psychological disorders, such as hysteria and phobias. The symptom expresses the conflict among the parts of the personality while it protects the self from recognizing the inner turmoil. A person with a fear of knives, for example, is shielded from becoming aware of her own unconscious aggressive impulses to use a knife to murder someone or attack herself. So long as the symptom is maintained (and the person avoids knives), the murderous or suicidal impulses are kept at bay. If the superego becomes overly powerful, it may create excessive feelings of guilt and lead to depression. People who intentionally hurt others without feeling guilty about it are believed to have an underdeveloped superego.

Freud believed that the underlying conflicts that give rise to psychological disorders originate in childhood and are buried in the depths of the unconscious. Through psychoanalysis, he sought to help people uncover and learn to deal with these underlying conflicts. This way, they can free themselves of the need to maintain the overt symptoms.

Perpetual vigilance and defense take their toll. The ego can weaken and, in extreme cases, lose the ability to keep a lid on the id. When the urges of the id spill forth, untempered by an ego that is either weakened or underdeveloped, the result is **psychosis.** Psychosis is characterized, in general, by bizarre behavior and thoughts and by faulty perceptions of reality such as hallucinations ("hearing voices" or seeing things that are not present). Speech may become incoherent; there may be bizarre posturing and gestures. Schizophrenia is the major form of psychosis (see Chapter 12).

psychosis A severe form of disturbed behavior characterized by impaired ability to interpret reality and difficulty meeting the demands of daily life.

Freud equated psychological health with the *abilities to love and to work.* The normal person can care deeply for other people, find sexual gratification in an intimate relationship, and engage in productive work. To accomplish these ends, sexual impulses must be expressed in a relationship with a partner of the opposite gender. Other impulses must be channeled (sublimated) into socially productive pursuits, such as work, enjoyment of art or music, or creative expression. Other psychodynamic theorists, such as Jung and Adler, emphasized the need to develop a differentiated self—the unifying force that provides direction to behavior and helps develop a person's potential. Adler also believed that psychological health involves efforts to compensate for feelings of inferiority by striving to excel in one or more of the arenas of human endeavor. For Mahler, similarly, abnormal behavior derives from failure to develop our distinctive and individual identity.

Evaluating Psychodynamic Models Psychodynamic theory has pervaded the general culture (Lothane, 2006). Even people who have never read Freud look for symbolic meanings in slips of the tongue and assume that abnormalities can be traced to early childhood. Terms such as *ego* and *repression* have become commonplace, although their everyday meanings do not fully overlap with those intended by Freud.

The psychodynamic model led us to recognize that we are not transparent to ourselves (Panek, 2002)—that our behavior may be driven by hidden drives and impulses of which we are unaware or only dimly aware. Moreover, Freud's beliefs about childhood sexuality were both illuminating and controversial. Before Freud, children were perceived as pure innocents, free of sexual desire. Freud recognized, however, that young children, even infants, seek pleasure through stimulation of the oral and anal cavities and the phallic region. Yet his beliefs that primitive drives give rise to incestuous desires, intrafamily rivalries, and conflicts remain sources of controversy, even within psychodynamic circles.

Many critics, including some of Freud's followers, believe he placed too much emphasis on sexual and aggressive impulses and underemphasized social relationships. Critics have also argued that the psychic structures—the id, ego, and superego—may be little more than useful fictions, poetic ways to represent inner conflict. Many critics argue that Freud's hypothetical mental processes are not scientific concepts because they cannot be directly observed or tested. Therapists can speculate, for example, that a client "forgot" about an appointment because "unconsciously" she or he did not want

B. F. Skinner

behaviorism The school of psychology that defines psychology as the study of observable behavior.

to attend the session. Such unconscious motivation may not be subject to scientific verification, however. On the other hand, psychodynamically oriented researchers have developed scientific approaches to test many of Freud's concepts. They believe that a growing body of evidence supports the existence of unconscious processes that lie outside ordinary awareneness, including defense mechanisms such as repression (Cramer, 2000; Westen & Gabbard, 2002).

Learning Models

The psychodynamic models of Freud and his followers were the first major psychological theories of abnormal behavior. Other relevant psychologies also took shape early in the 20th century. The behavioral perspective is identified with the Russian physiologist Ivan Pavlov (1849–1936), the discoverer of the conditioned reflex, and the American psychologist John B. Watson (1878–1958), the father of **behaviorism.** The behavioral perspective focuses on the role of learning in explaining both normal and abnormal behavior. From a learning perspective, abnormal behavior represents the acquisition, or learning, of inappropriate, maladaptive behaviors.

From the medical and psychodynamic perspectives, abnormal behavior is *symptomatic,* respectively, of underlying biological or psychological problems. From the learning perspective, however, the abnormal behavior itself is the problem. In this perspective, abnormal behavior is learned in much the same way as normal behavior. Why do some people behave abnormally? It may be that their learning histories differ from most people's. For example, a person who was harshly punished as a child for masturbating might become anxious, as an adult, about sexuality. Poor child-rearing practices, such as capricious punishment for misconduct and failure to praise or reward good behavior, might lead to antisocial behavior. Children with abusive or neglectful parents might learn to pay more attention to inner fantasies than to the world outside and have difficulty distinguishing reality from fantasy.

Watson and other behaviorists, such as Harvard University psychologist B. F. Skinner (1904–1990), believed that human behavior is the product of our genetic inheritance and environmental or situational influences. Like Freud, Watson and Skinner discarded concepts of personal freedom, choice, and self-direction. But whereas Freud saw us as driven by irrational forces, behaviorists see us as products of environmental influences that shape and manipulate our behavior. Behaviorists also believed that we should limit the study of psychology to behavior itself rather than focus on underlying motivations. Therapy, in this view, consists of shaping behavior rather than seeking insight into the workings of the mind. Behaviorists focus on the roles of two forms of learning in shaping both normal and abnormal behavior, classical conditioning and operant conditioning.

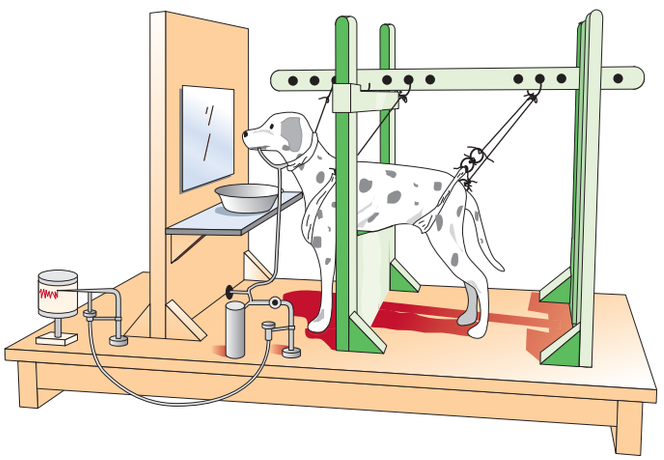
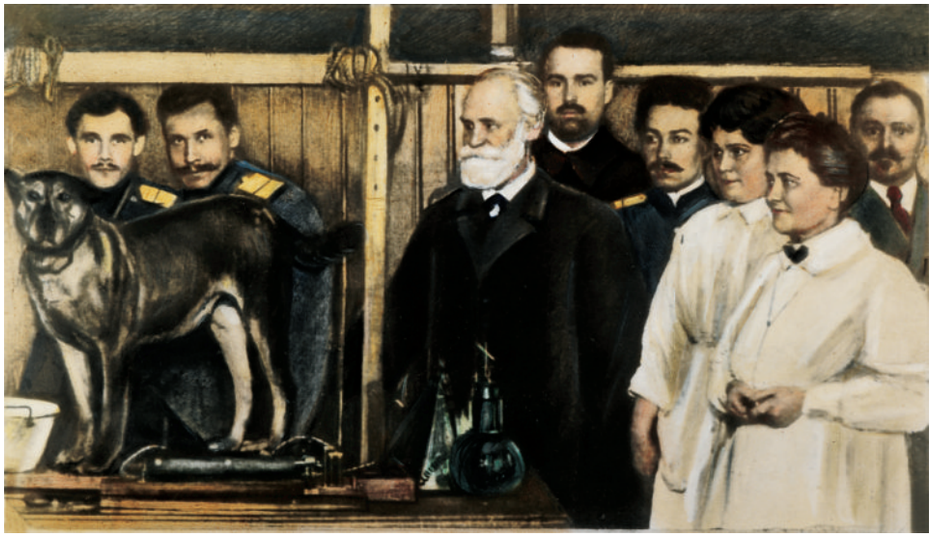


FIGURE 2.6 The apparatus used in Ivan Pavlov's experiments on conditioning. Pavlov used an apparatus such as this to demonstrate the process of conditioning. To the left is a two-way mirror, behind which a researcher rings a bell. After the bell is rung, meat is placed on the dog's tongue. Following several pairings of the bell and the meat, the dog learns to salivate in response to the bell. The animal's saliva passes through the tube to a vial, where its quantity may be taken as a measure of the strength of the conditioned response.

Role of Classical Conditioning The Russian physiologist Ivan Pavlov discovered the conditioned reflex (now called a *conditioned response*) quite by accident. In his laboratory, he harnessed dogs to an apparatus like that in Figure 2.6 to study their salivary response to food. Along the way he observed that the animals would salivate and secrete gastric juices even before they started to eat. These responses appeared to be elicited by the sound of the food cart as it was wheeled into the room. So Pavlov undertook an experiment that showed that animals could learn to salivate in response to other stimuli, such as the sound of a bell, if these stimuli were *associated* with feeding.



Ivan Pavlov. Russian physiologist Ivan Pavlov (center, with white beard) demonstrates his apparatus for classical conditioning to students. How might the principles of classical conditioning explain the acquisition of excessive irrational fears that we refer to as phobias?

Because dogs don't normally salivate to the sound of bells, Pavlov reasoned that they had acquired this response. He called it a **conditioned response** (CR), or conditioned reflex, because it had been paired with what he called an **unconditioned stimulus** (US)—in this case, food—which naturally elicited salivation (see Figure 2.7). The salivation to food, an unlearned response, Pavlov called the **unconditioned response** (UR), and the bell, a previously neutral stimulus, he called the **conditioned stimulus** (CS).

Can you recognize examples of **classical conditioning** in your everyday life? Do you flinch in the waiting room at the sound of the dentist's drill? The sound of the drill may be a conditioned stimulus that elicits conditioned responses of fear and muscle tension.

Phobias or excessive fears may be acquired by classical conditioning. For instance, a person may develop a phobia for riding on elevators following a traumatic experience on an elevator. In this example, a previously neutral stimulus (elevator) becomes paired or associated with an aversive stimulus (trauma), which leads to the conditioned response (phobia).

conditioned response In classical conditioning, a learned response to a previously neutral stimulus.

unconditioned stimulus A stimulus that elicits an unlearned response.

unconditioned response An unlearned response.

conditioned stimulus A previously neutral stimulus that evokes a conditioned response after repeated pairings with an unconditioned stimulus that had previously evoked that response.

classical conditioning A form of learning in which a response to one stimulus can be made to occur to another stimulus by pairing or associating the two stimuli.

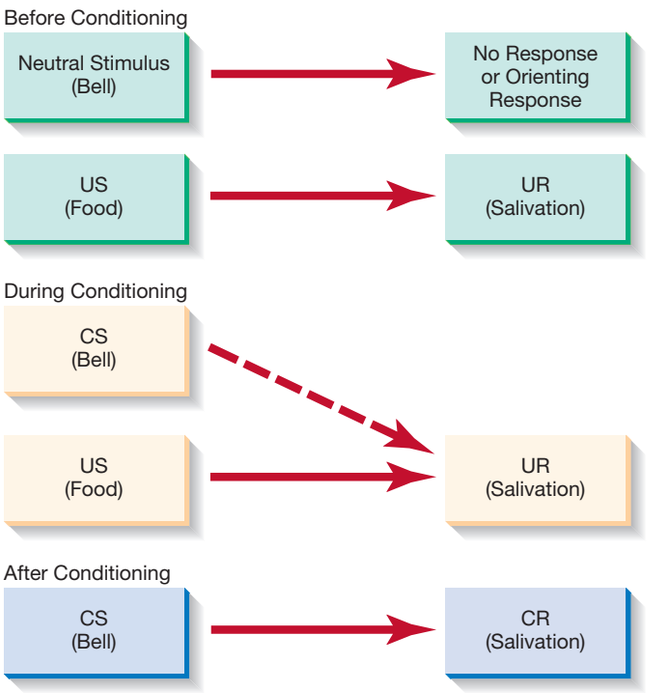


FIGURE 2.7 Schematic diagram of the process of classical conditioning. Before conditioning, food (an unconditioned stimulus, or US) placed on a dog's tongue will naturally elicit salivation (an unconditioned response, or UR). The bell, however, is a neutral stimulus that may elicit an orienting response but not salivation. During conditioning, the bell (the conditioned stimulus, or CS) is rung while food (the US) is placed on the dog's tongue. After several conditioning trials have occurred, the bell (the CS) will elicit salivation (the conditioned response, or CR) when it is rung, even though it is not accompanied by food (the US). The dog is said to have been conditioned, or to have learned to display the conditioned response (CR) in response to the conditioned stimulus (CS). Learning theorists have suggested that irrational excessive fears of harmless stimuli may be acquired through principles of classical conditioning.

Watson himself had demonstrated how a fear response could be acquired through classical conditioning. Together with his research assistant who was later to become his wife, Rosalie Rayner, Watson classically conditioned an 11-month-old boy, who is well known in the annals of psychology as "Little Albert," to develop a fear response to a white rat (Watson & Rayner, 1920). Prior to conditioning, the boy showed no fear of the rat and had actually reached out to stroke it. Then, as the boy reached for the animal, Watson banged a steel bar with a hammer just behind the boy's head, creating a loud, aversive sound. After repeated pairings of the jarring sound and the presence of the animal, Albert sure enough showed a conditioned response, displaying fear to the rat alone.

From the learning perspective, normal behavior involves responding adaptively to stimuli, including conditioned stimuli. After all, if we do not learn to be afraid of putting our hand too close to a hot stove after one or two experiences of being burned or nearly burned, we might repeatedly suffer unnecessary burns. On the other hand, acquiring inappropriate and maladaptive fears on the basis of conditioning may cripple our efforts to function in the world. Chapter 6 explains how conditioning may help explain anxiety disorders such as phobias and posttraumatic stress disorder.

Role of Operant Conditioning Classical conditioning can explain the development of simple, reflexive responses, such as salivating to cues associated with food, as well as the emotional response of fear to stimuli that have been paired with painful or aversive stimuli. But classical conditioning does not account for more complex behaviors, such as studying, working, socializing, or preparing meals. The behavioral psychologist B. F. Skinner (1938) called these types of complex behaviors *operant responses* because they operate on the environment to produce effects or consequences. In **operant conditioning,** responses are acquired and strengthened by their consequences.

operant conditioning A form of learning in which behavior is acquired and strengthened when it is reinforced.

We acquire responses or skills, such as raising our hand in class, that lead to **reinforcement.** Reinforcers are changes in the environment (stimuli) that increase the frequency of the preceding behavior.

reinforcement A stimulus or event that increases the frequency of the response that it follows.

Behaviors that lead to rewarding consequences are strengthened—that is, they are more likely to occur again. Over time, such behaviors become habits (Staddon & Cerutti, 2003). For example, you likely acquired the habit of raising your hand in class on the basis of experiences early in grade school when your teachers responded to you only if you first raised your hand.

Skinner identified two types of reinforcers. **Positive reinforcers,** which are commonly called *rewards*, boost the frequency of a behavior when they are introduced or presented. Most of Skinner's work focused on studying operant conditioning in animals, such as pigeons. If a pigeon gets food when it pecks a button, it will contine to peck a button until it has eaten its fill. If we get a friendly response from people when we hold the door open for them, we're more likely to develop the habit of opening the door for others. **Negative reinforcers** increase the frequency of behavior when they are *removed.* If picking up a crying child stops the crying, the behavior (picking up the child) is negatively reinforced (made stronger) by the removal of the negative reinforcer (the crying, an aversive stimulus).

positive reinforcers Reinforcers that, when introduced, increase the frequency of the preceding behavior.

negative reinforcers Reinforcers that, when removed, increase the frequency of the preceding behavior.

Adaptive, normal behavior involves learning responses or skills that lead to reinforcement. We learn behaviors that allow us to obtain positive reinforcers or rewards, such as food, money, and approval, and that help us remove or avoid negative reinforcers, such as pain and disapproval. But if our early learning environments do not provide opportunities for learning new skills, we might be hampered in our efforts to develop the skills needed to obtain reinforcement. A lack of social skills, for example, may reduce our opportunities for social reinforcement (approval or praise from others), which may lead in turn to depression and social isolation. In Chapter 8, we examine links between changes in reinforcement levels and the development of depression. In Chapter 12, we examine how principles of reinforcement are incorporated in learning-based treatment programs to help people with schizophrenia develop more adaptive social behaviors.

Punishment can be considered the flip side of reinforcement. Punishments are aversive stimuli that *decrease* the frequency of the behavior they follow. Punishment may take many forms, including physical punishment (spanking or use of other painful stimuli), removal of a reinforcing stimulus (turning off the TV), assessment of monetary penalties (parking tickets, etc.), taking away privileges ("You're grounded!"), or removal from a reinforcing environment ("time-out").

punishment Application of aversive or painful stimuli that reduces the frequency of the behavior it follows.

Before going further, let us distinguish between two terms that are often confused: *negative reinforcement* and *punishment*. The confusion arises from the fact that an aversive or painful stimulus can serve as either a negative reinforcer or a punishment, depending on the situation. With punishment, the *introduction* or application of the aversive or painful stimulus weakens the preceding behavior. With negative reinforcement, the removal of the aversive or painful stimulus strengthens the preceding behavior. A baby's crying can serve as a punishment (if it weakens the preceding behavior, such as turning your attention away from the baby) or a negative reinforcer (if it strengthens the behavior that leads to its removal, such as picking the baby up).

Punishment, especially physical punishment, may not eliminate undesirable behavior, although it may suppress it for the moment. The behavior may return when the punishment is withdrawn. Another limitation of punishment is that it does not lead to the development of more desirable alternative behaviors. It may also encourage people to withdraw from such learning situations. Punished children may cut classes, drop out of school, or run away. Moreover, punishment may generate anger and hostility rather than constructive learning and may cross the boundary into abuse, especially when it is repetitive and severe. Child abuse figures prominently in many abnormal behavior patterns, including some types of personality disorders (Chapter 13) and dissociative disorders (Chapter 7).

TRUTH or FICTION

Punishment does not eliminate undesirable behavior.

TRUE. Punishment does not eliminate an undesirable behavior, but only suppresses it. The behavior may return when it is no longer punished.

Psychologists recognize that reinforcement is more desirable than punishment. But rewarding good behavior requires paying attention to it, not just to misbehavior. Some children who develop conduct problems gain attention from others only when they misbehave. Consequently, other people may be inadvertently reinforcing these children for undesirable behavior. Learning theorists point out that adults need to teach children desirable behavior and regularly reinforce them for displaying it.

Let us now consider a contemporary model of learning, called *social-cognitive theory* (formerly called *social-learning theory*), which considers the role of cognitive factors in learning and behavior.

Social-Cognitive Theory **Social-cognitive theory** represents the contributions of theorists such as Albert Bandura (1925–), Julian B. Rotter (1916–), and Walter Mischel (1930–). Social-cognitive theorists expanded traditional learning theory by including roles for thinking, or cognition, and learning by observation, which is also called **modeling** (Bandura, 2004). A phobia for spiders, for example, may be learned by observing the fearful reactions of others in real life, on television, or in the movies.

social-cognitive theory A learning-based theory that emphasizes observational learning and incorporates roles for cognitive variables in determining behavior.

modeling Learning by observing and imitating the behavior of others.

Social-cognitive theorists believe that people have an impact on their environment, just as their environment has an impact on them (Bandura, 2001, 2004). Social-cognitive theorists agree with traditional behaviorists like Watson and Skinner that theories of human nature should be tied to observable behavior. However, they argue that factors *within* the person, such as **expectancies** and the values placed on particular goals, also need to be considered in explaining human behavior. For example, we will see in Chapter 9 that people who hold more positive expectancies about the effects of a drug are more likely to use the drug and to use larger quantities of the drug than are people with less positive expectancies.

expectancies Beliefs about expected outcomes.

Evaluating Learning Models Learning perspectives have spawned a model of therapy, called *behavior therapy* (also called *behavior modification*), that involves systematically applying learning principles to help people change their behavior (see Chapter 4). Behavior therapy techniques have helped people overcome a wide range of psychological problems, including phobias and other anxiety disorders, sexual

Observational learning. According to social-cognitive theory, much human behavior is acquired through modeling, or observational learning.

dysfunctions, and depression. Moreover, reinforcement-based programs are now widely used in helping parents learn better parenting skills and helping children learn in the classroom.

Critics contend that behaviorism alone cannot explain the richness of human behavior and that human experience cannot be reduced to observable responses. Many learning theorists, too—especially social-cognitive theorists—have been dissatisfied with the strict behavioristic view that environmental influences—rewards and punishments—mechanically control our behavior. Humans experience thoughts and dreams and formulate goals and aspirations; behaviorism does not seem to address much of what it means to be human. Social-cognitive theorists have broadened the scope of traditional behaviorism, but critics claim that social-cognitive theory places too little emphasis on genetic contributions to behavior and doesn't provide a full enough account of subjective experience, such as self-awareness and the flow of consciousness. As we'll see next, subjective experience takes center stage in humanistic models.

self-actualization In humanistic psychology, the tendency to strive to become all that one is capable of being. The motive that drives one to reach one's full potential and express one's unique capabilities.

unconditional positive regard Valuing other people as having basic worth regardless of their behavior at a particular time.

conditional positive regard Valuing other people on the basis of whether their behavior meets one's approval.

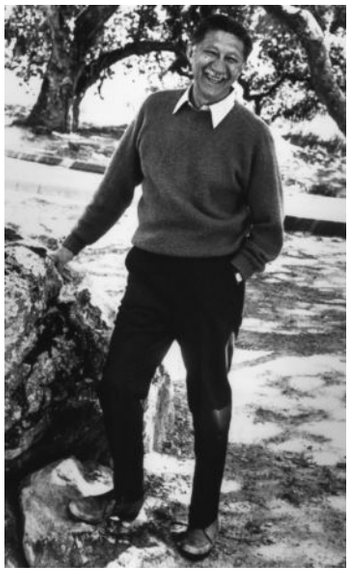
Humanistic Models

A "third force" in modern psychology emerged during the mid-20th century—humanistic psychology. American psychologists Carl Rogers (1902–1987) and Abraham Maslow (1908–1970) believed that people have an inborn tendency toward **self-actualization**—to strive to become all they are capable of being. Each of us possesses a singular cluster of traits and talents that gives us our own set of feelings and needs and our own perspective on life. By recognizing and accepting our genuine needs and feelings, by being true to ourselves, we live *authentically,* with meaning and purpose. We may not decide to act out every wish and fancy, but awareness of our authentic feelings and subjective experiences can help us make more meaningful choices.

To understand abnormal behavior, in the humanist's view, we need to understand the roadblocks that people encounter in striving for self-actualization and authenticity. To accomplish this, psychologists must learn to view the world from clients' own perspectives because clients' subjective views of their world lead them to interpret and evaluate their experiences in either self-enhancing or self-defeating ways. The humanistic viewpoint involves the attempt to understand the subjective experience of others, the stream of conscious experiences people have of "being in the world."

Self-actualization. Humanistic theorists believe that there exists in each of us a drive toward self-actualization—to become all that we are capable of being. In the humanistic view, each of us, such as artist Geraldine Pitts, shown here with one of her paintings, is unique. No two people follow quite the same pathway toward self-actualization.

Humanistic Concepts of Abnormal Behavior Rogers held that abnormal behavior results from a distorted concept of the self. Parents can help children develop a positive self-concept by showing them **unconditional positive regard;** that is, by prizing them and showing them that they are worthy of love irrespective of their behavior at any given time. Parents may disapprove of a certain behavior but need to convey to their children that the behavior is undesirable, not the child. However, when parents show children **conditional positive regard**—accept them only when they behave in the way the parents want them to behave—the children may learn to disown all the thoughts, feelings, and behaviors their parents have rejected. Children will learn to develop *conditions of worth;* that is, they will think of themselves as worthwhile only if they behave in certain approved ways. For example, children whose parents seem to value them only when they are compliant may deny to themselves that they ever feel angry. Children in some families learn that it is unacceptable to hold their own ideas, lest they depart from their parents' views. Parental disapproval causes them to see themselves as "bad" and their feelings as wrong, selfish, or even evil. To retain their self-esteem, they may have to deny their genuine feelings or disown parts of themselves. The result can be a distorted *self-concept:* the children become strangers to their true selves.



Carl Rogers and Abraham Maslow. Two of the principal forces in humanistic psychology.

Rogers believed we become anxious when we sense that our feelings and ideas are inconsistent with a distorted self-concept that mirrors what others expect us to be—for example, if our parents expected us to be docile and obedient but we sense ourselves becoming angry or defiant. Because anxiety is unpleasant, we may deny to ourselves that these feelings and ideas even exist. And so the actualization of our authentic self is bridled. We channel our psychological energy not toward growth but toward continued denial and self-defense. Under such conditions, we cannot hope to perceive our genuine values or personal talents. The result is frustration and dissatisfaction, which set the stage for abnormal behavior.

According to the humanists, we cannot fulfill all the wishes of others and remain true to ourselves. This does not mean that self-actualization invariably leads to conflict. Rogers believed that people hurt one another or become antisocial in their behavior only when they are frustrated in their endeavors to reach their unique potentials. When parents and others treat children with love and tolerance for their differences, children, too, grow up to be loving—even if some of their values and preferences differ from their parents' choices.

In Rogers's view, the pathway to self-actualization involves a process of self-discovery and self-acceptance, of getting in touch with our true feelings, accepting them as our own, and acting in ways that genuinely reflect them. These are the goals of Rogers's method of psychotherapy, called *client-centered therapy* or *person-centered therapy.*

Evaluating Humanistic Models The strength of humanistic models in understanding abnormal behavior lies largely in their focus on conscious experience and their therapy methods that guide people toward self-discovery and self-acceptance. The humanistic movement brought concepts of free choice, inherent goodness, personal responsibility, and authenticity into modern psychology. Ironically, the primary strength of the humanistic approach—its focus on conscious experience—may also be its primary weakness. Conscious experience is private and subjective, which makes it difficult to quantify and study objectively. How can psychologists be certain they accurately perceive the world through the eyes of their clients? Humanists may counter that we should not shrink from the challenge of studying consciousness because to do so would deny an essential aspect of what it means to be human.

Critics also claim that the concept of self-actualization—which is so basic to Maslow and Rogers—cannot be proved or disproved. Like a psychic structure, a

TRUTH or FICTION

Children may acquire a distorted self-concept that mirrors what others expect them to be, but that does not reflect who they truly are.

✓**TRUE.** According to Rogers, children can develop a distorted self-concept that mirrors what others expect them to be but which is not true to themselves.

The makings of unconditional positive regard? Rogers believed that parents can help their children develop self-esteem and set them on the road toward self-actualization by showing them unconditional positive regard—prizing them on the basis of their inner worth, regardless of their behavior of the moment.

self-actualizing force is not directly measurable or observable. It is inferred from its supposed effects. Self-actualization also yields circular explanations for behavior. When someone is observed engaging in striving, what do we learn by attributing striving to a self-actualizing tendency? The source of the tendency remains a mystery. Similarly, when someone is observed *not* to be striving, what do we gain by attributing the lack of endeavor to a blocked or frustrated self-actualizing tendency? We must still determine the source of frustration.

Cognitive Models

The word *cognitive* derives from the Latin *cognitio,* meaning "knowledge." Cognitive theorists study the cognitions—the thoughts, beliefs, expectations, and attitudes—that accompany and may underlie abnormal behavior. They focus on how reality is colored by our expectations, attitudes, and so forth, and how inaccurate or biased processing of information about the world—and our places within it—can give rise to abnormal behavior. Cognitive theorists believe that our interpretations of the events in our lives, and not the events themselves, determine our emotional states.

Information-Processing Models Many cognitive psychologists apply concepts of computer science to human cognition. Computers process information to solve problems. Information is fed into the computer (encoded so that it can be accepted by the computer as input) and placed in *memory* while it is manipulated. You can also place the information permanently in *storage,* on a CD-ROM, a hard disk, or another device. Information-processing theorists discuss human cognition in terms such as *input* (based on perception), *manipulation* (interpreting or transforming information), *storage* (placing information in memory), *retrieval* (accessing information from memory), and *output* (acting on the information). Psychological disorders are seen as disturbances in these processes. The blocking or distortion of input or the faulty storage, retrieval, or manipulation of information can lead to distorted output (e.g., bizarre behavior). People with schizophrenia, for example, frequently jump from topic to topic in a disorganized fashion, which may reflect problems in retrieving and manipulating information. They also seem to have difficulty focusing their attention and filtering out extraneous stimuli, such as distracting noises, which may represent problems in the initial processing of input from their senses.

Manipulation of information may also be distorted by what cognitive therapists call *cognitive distortions,* or errors in thinking. For example, people who are depressed tend to develop an unduly negative view of their personal situation by exaggerating the importance of unfortunate events they experience, such as receiving a poor evaluation at work or being rejected by a dating partner. Cognitive theorists such as Albert Ellis (1913–2007) and Aaron Beck (1921–) have postulated that distorted or irrational thinking patterns can lead to emotional problems and maladaptive behavior.

Social-cognitive theorists, who share many basic ideas with the cognitive theorists, focus on the ways in which social information is encoded. For example, aggressive boys and adolescents are likely to incorrectly encode other people's behavior as threatening (see Chapter 14). They assume other people intend them ill when they do not. Aggressive children and adults may behave in ways that elicit coercive or hostile behavior from others, which serves to confirm their aggressive expectations (Meichenbaum, 1993). Rapists, especially date rapists, may misread a woman's expressed wishes. They may wrongly assume, for example, that the woman who says "no" really means yes and is merely playing "hard to get."

Albert Ellis Psychologist Albert Ellis (1977b, 1993), a prominent cognitive theorist, believed that troubling events in themselves do not lead to anxiety, depression, or disturbed behavior. Rather, it is the irrational beliefs we hold about unfortunate experiences that foster negative emotions and maladaptive behavior. Consider someone who loses a job and becomes anxious and despondent about it. It may seem that being fired is the direct cause of the person's misery, but the misery actually stems from the person's beliefs about the loss, not directly from the loss itself.

Ellis used an "ABC approach" to explain the causes of the misery. Being fired is an *activating event* (A). The ultimate outcome, or *consequence* (C), is emotional distress. But the activating event (A) and the consequences (C) are mediated by various *beliefs* (B). Some of these beliefs might include "That job was the major thing in my life," "What a useless washout I am," "My family will go hungry," "I'll never be able to find another job as good," "I can't do a thing about it." These exaggerated and irrational beliefs compound depression, nurture helplessness, and distract us from evaluating what to do.

The situation can be diagrammed like this:

ACTIVATING EVENT ⟶ BELIEF ⟶ CONSEQUENCES

Ellis pointed out that apprehension about the future and feelings of disappointment are perfectly normal when people face losses. However, the adoption of irrational beliefs leads people to catastrophize their disappointments, leading to profound distress and states of depression. Irrational beliefs—"I must have the love and approval of nearly everyone who is important to me or else I'm a worthless and unlovable person"—impair coping ability. In his later writings, Ellis emphasized the demanding nature of irrational or self-defeating beliefs—tendencies to impose "musts" and "shoulds" on ourselves (Ellis, 1993, 1997). Ellis noted that the desire for others' approval is understandable, but it is irrational to assume that one must have it to survive or to feel worthwhile. It would be marvelous to excel in everything we do, but it's absurd to demand it of ourselves or believe that we couldn't stand it if we failed to measure up. Ellis developed a model of therapy, called *rational-emotive behavior therapy* (REBT), to help people dispute these irrational beliefs and substitute more rational ones. Ellis admitted that childhood experiences are involved in the origins of irrational beliefs, but he maintained that it is repetition of these beliefs in the "here and now" that continues to make us miserable. For most people who are anxious and depressed, the key to greater happiness does not lie in discovering and liberating deep-seated conflicts, but in recognizing and modifying irrational self-demands.

Albert Ellis. Cognitive theorist Albert Ellis believed that negative emotions arise from the judgments we make about the events we experience, not from the events themselves.

TRUTH or FICTION

According to a leading cognitive theorist, emotional distress is caused by the beliefs people hold about negative life experiences, not by the experiences themselves.

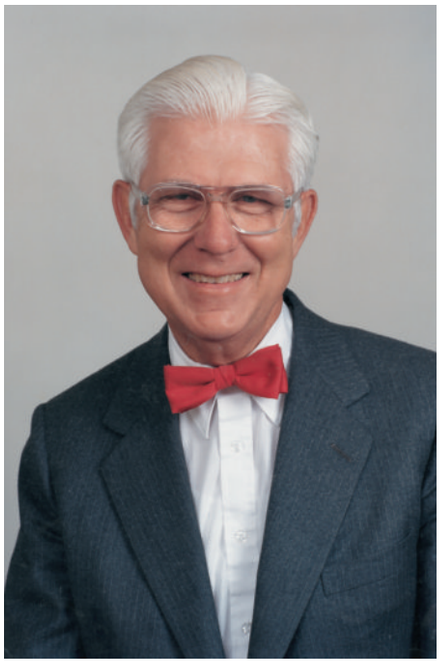
✓ **TRUE.** Ellis believed that emotional distress is determined by the beliefs we hold about events we experience, not by the events themselves.

Aaron Beck Another prominent cognitive theorist, psychiatrist Aaron Beck, proposes that depression may result from errors in thinking or "cognitive distortions," such as judging oneself entirely on the basis of one's flaws or failures and interpreting events in a negative light (through blue-colored glasses, as it were) (A. T. Beck et al., 1979). Beck stresses the four basic types of cognitive distortions that contribute to emotional distress:

1. *Selective abstraction.* People may *selectively abstract* (focus exclusively on) the parts of their experiences that reflect on their flaws and ignore evidence of their competencies. For example, a student may focus entirely on the one mediocre grade received on a math test and ignore all the higher grades.
2. *Overgeneralization.* People may *overgeneralize* from a few isolated experiences. For example, a person may believe he will never marry because he was rejected by a date.
3. *Magnification.* People may blow out of proportion, or *magnify,* the importance of unfortunate events. For example, a student may catastrophize a bad test grade by jumping to the conclusion that she will flunk out of college and her life will be ruined.
4. *Absolutist thinking.* Absolutist thinking is seeing the world in black-and-white terms, rather than in shades of gray. For example, an absolutist thinker may assume that a work evaluation less than a total rave is a total failure.

Like Ellis, Beck has developed a major model of therapy, called *cognitive therapy,* which focuses on helping individuals with psychological disorders identify and correct faulty ways of thinking.

Evaluating Cognitive Models As we'll see in later chapters, cognitive theorists have had an enormous impact on our understanding of abnormal behavior patterns and development of therapeutic approaches. The overlap between the learning-based and



Aaron Beck. Aaron Beck, a leading cognitive theorist, focuses on how errors in thinking, or cognitive distortions, set the stage for negative emotional reactions in the face of unfortunate events.

cognitive approaches is best represented by the emergence of *cognitive-behavioral therapy* (CBT), a form of therapy that focuses on modifying self-defeating beliefs in addition to overt behaviors.

A major issue concerning cognitive perspectives is their range of applicability. Cognitive therapists have largely focused on emotional disorders relating to anxiety and depression. They have had less impact on the development of treatment approaches, or conceptual models, of more severe forms of disturbed behavior, such as schizophrenia. Moreover, in the case of depression, it remains unclear, as we see in Chapter 8, whether distorted thinking patterns are causes of depression or are themselves effects of depression.

THE SOCIOCULTURAL PERSPECTIVE

Does abnormal behavior arise from forces within the person, as the psychodynamic theorists propose, or from learned maladaptive behaviors, as the learning theorists suggest? Or, as the *sociocultural perspective* proposes, does a fuller accounting of abnormal behavior require that we consider the roles of social and cultural factors, including factors relating to ethnicity, gender, and social class? As we noted in Chapter 1, sociocultural theorists seek causes of abnormal behavior in the failures of society rather than in the person. Some of the more radical psychosocial theorists, like Thomas Szasz, even deny the existence of psychological disorders or mental illness. Szasz (1961, 2000) argues that "abnormal" is merely a label society attaches to people whose behavior deviates from accepted social norms. According to Szasz, this label is used to stigmatize social deviants.

Throughout the text we examine relationships between abnormal behavior patterns and sociocultural factors such as gender, ethnicity, and socioeconomic status. Here let us examine recent research on relationships between ethnicity and mental health.

Ethnicity and Mental Health

When Europeans first arrived on America's shores, the land was populated solely by Native Americans. By the time the United States achieved nationhood, the numbers of people of European descent were approaching those of Native Americans. During the 19th century, the nation became predominantly populated by people of European descent. Although Euro-Americans (also called European Americans or non-Hispanic White Americans) remain in the majority today, the nation is becoming increasingly ethnically diverse.

Presently, African Americans, whose ancestors were forcibly brought to this country and enslaved, represent about 12% of the population. Latinos (Hispanic Americans) account for about 13% of the population, whereas Asian Americans/Pacific Islanders account for about 4% and Native Americans for nearly 1%. The terms *Hispanic American* or *Latino(a)* refer to persons of Mexican, Puerto Rican, Cuban, or other Central and South American or Spanish origin.

The term *minority* is quickly becoming something of a misnomer, as traditionally identified minority groups now comprise the majority in many U.S. cities and in the nation's most populous state, California. White Euro-Americans are expected to become a minority in the nation at some point during this century. The largest anticipated increase among population groups will be among Latinos (Hispanic Americans), as their population ranks are expected to jump to about 24% by the year 2050. Latinos (Hispanics) now represent the nation's largest minority group, having surpassed African Americans for the first time in the nation's history.

Ethnic designations are general categories that encompass many different subgroups. For example, Latinos include Spanish-speaking people who may trace their heritage to Mexico, Puerto Rico, or Colombia. The population of Asian Americans/Pacific Islanders includes people whose backgrounds and ancestries represent areas as diverse as China, Japan, Korea, Indochina, Thailand, the Philippines, India, and Pakistan. Asian Americans may perceive themselves as Filipino Americans or Chinese

Americans rather than Asian Americans per se. When considering racial or ethnic distinctions, we must take into account differences among cultural and ethnic subgroups within our own culture.

We also need to recognize that traditional racial or ethnic distinctions are becoming increasingly blurry as increasing numbers of people in the United States and Canada identify themselves as biracial, multiracial, or multiethnic. Individuals of multiracial background, such as golfer Tiger Woods, baseball player Derek Jeter, and singer Mariah Carey, cannot easily be classified according to traditional racial groupings. Nearly seven million U.S. residents described themselves as multiracial in the most recent population census (Schmitt, 2001a, 2001b). Young people today are twice as likely as their parents to consider themselves multiracial (Takahashi, 2001).

Given the increasing ethnic diversity of the population, researchers have begun to study ethnic group differences in the prevalence of psychological disorders. Knowing that a disorder disproportionately affects one group or another can help planners direct prevention and treatment programs to the groups that are most in need (Pole et al., 2005). Researchers recognize that income level or socioeconomic status must be considered when comparing rates of a given diagnosis across ethnic groups. We also need to account for differences among ethnic subgroups, such as differences among the various subgroups that comprise the Hispanic American and Asian American populations. We find, for example, higher levels of depression among Hispanic immigrants to the United States from Central America than from Mexico, even when considering differences in educational backgrounds (Salgado de Snyder, Cervantes, & Padilla, 1990).

We should be cautious—and think critically—when interpreting ethnic group differences in rates of diagnoses of psychological disorders. Might these differences reflect ethnic or racial differences, or differences in other factors on which groups may vary, such as socioeconomic level, living conditions, or cultural backgrounds?

A recent analysis of ethnic group differences in rates of mental disorders revealed an interesting pattern (Breslau et al., 2005). Using data from a nationally representative sample of adult Americans, investigators found that traditionally disadvantaged groups (non-Hispanic Black Americans and Hispanic Americans) had either significantly lower rates of psychological disorders or comparable rates, as compared to European Americans (non-Hispanic Whites) (see Figure 2.8). However, when the investigators looked at the persistence, or *chronicity,* of psychological disorders, they found that

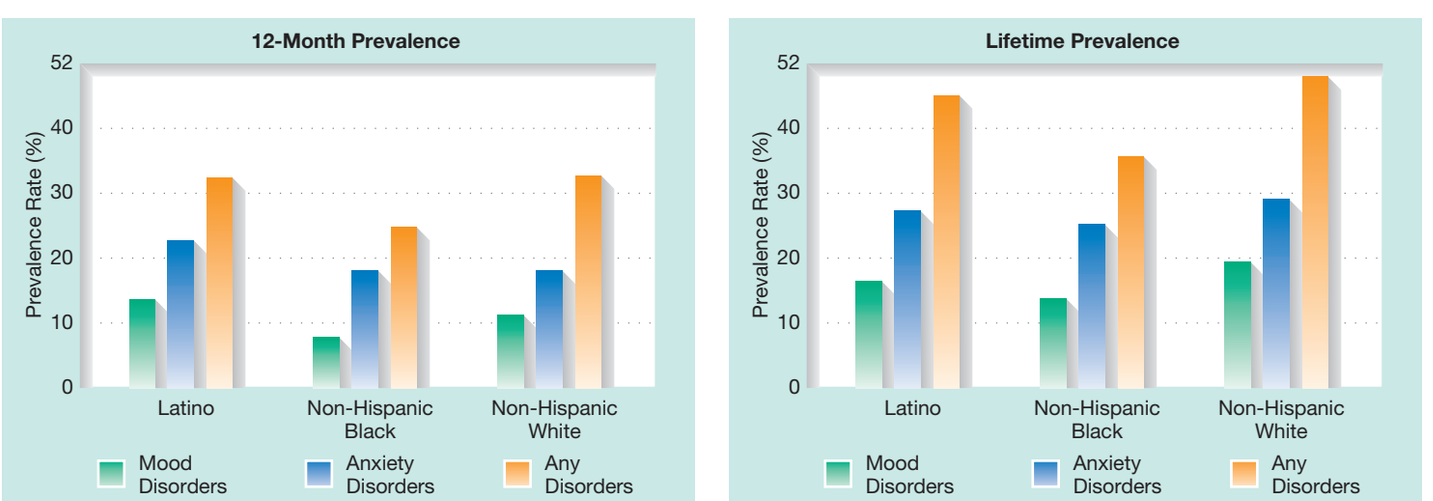


FIGURE 2.8 Ethnicity and psychological disorders in the United States.
We can see that European Americans (non-Hispanic Whites) tend to have higher prevalence rates of psychological disorders than either Hispanic Americans (Latinos) or (non-Hispanic) Black Americans. Though not all of these differences were statistically significant, in none of these comparisons were there significantly higher prevalence rates among Hispanic Americans and Black Americans than among European Americans.

Source: Breslau et al., 2005, based on data from the National Comordibity Survey (NCS).

TRUTH or FICTION

Black Americans have higher rates of psychological disorders than White European Americans, even when we account for income differences between these groups.

☑ **FALSE.** Rates of mental disorders overall are no higher among Black Americans than White European Americans.

Hispanic Americans and Black Americans tended to experience more persistent mental disorders than European Americans.

What might we make of these findings on persistence of mental disorders? Additional analysis showed that differences in persistence were not a function of socioeconomic level. But might they reflect differences in access to quality care? The question needs to be addressed in further research, but it is conceivable that White European Americans benefit from better access to quality mental health care that shortens the length of psychological disorders they experience.

Native Americans are a traditionally disadvantaged minority group with high rates of mental disorders. They also happen to be among the most impoverished ethnic groups in both the United States and Canada. Native Americans suffer from a much greater prevalence of mental health problems than other ethnicities, most commonly alcohol dependence, posttraumatic stress disorder (PTSD), and depression (Beals et al., 2005). The rate of alcohol-related disorders among Native Americans is six times that of other Americans (Rabasca, 2000a). The death rate due to suicide among adolescents in the 10- to 14-year-old age range is about four times higher among Native Americans than among other ethnic groups. Male Native American adolescents and young adults have the highest suicide rates in the nation (USDHHS, 1999a).

Asian Americans typically show lower rates of psychological disorders than the general U.S. population (Chang, 2002). But there are exceptions. When you envision stereotypes such as hula dancing, luaus, and wide tropical beaches, you may assume that Native Hawaiians are a carefree people. Reality paints a different picture, however. One reason for studying the relationship between ethnicity and abnormal behavior is to debunk erroneous stereotypes. Native Hawaiians, like other Native American groups, are economically disadvantaged and suffer a disproportionate share of physical diseases and mental health problems. Native Hawaiians tend to die at a younger age than other residents of Hawaii, largely because they face an increased risk of serious diseases, including hypertension, cancer, and heart disease (Johnson et al., 2004). They also show increased rates of risk factors associated with these life-threatening diseases, such as smoking, alcohol abuse, and being overweight. Compared to other Hawaiians, Native Hawaiians also experience higher rates of mental health problems, including higher suicide rates among males, higher rates of alcoholism and drug abuse, and higher rates of antisocial behavior.

In addition to economic disadvantage, the mental health problems of Native Americans, including Native Hawaiians, may at least partly reflect alienation and disenfranchisement from the land and a way of life that resulted from colonization by European cultures (Rabasca, 2000a). Native peoples often attribute mental health problems, especially depression and alcoholism, to the collapse of their traditional culture brought about by colonization (Timpson et al., 1988). Researchers recount how a Native Canadian elder in northwestern Ontario explained depression in his people (Timpson et al., 1988, p. 6):

> Before the White Man came into our world we had our own way of worshipping the Creator. We had our own church and rituals. When hunting was good, people would gather together to give gratitude. This gave us close contact with the Creator. There were many different rituals depending on the tribe. People would dance in the hills and play drums to give recognition to the Great Spirit. It was like talking to the Creator and living daily with its spirit. Now people have lost this. They can't use these methods and have lost conscious contact with this high power. The more distant we are from the Creator the more complex things are because we have no sense of direction. We don't recognize where life is from.

The depression so common among indigenous or native peoples may reflect the loss of a relationship with the world that was based on maintaining harmony with nature. The description of the loss of this special relationship reminds us of the Western concept of alienation.

Whatever the underlying differences in psychopathology among ethnic groups, members of ethnic minority groups tend to underutilize mental health services com-

pared to White European Americans (USDHHS, 1999a). Native Americans, for example, commonly seek help from traditional healers rather than mental health professionals (Beals et al., 2005). Members of other ethnic minority groups often turn to members of the clergy or to spiritualists. Those who do seek services are more likely to drop out prematurely from treatment. In Chapter 4 we consider barriers that limit the utilization of mental health services by various ethnic minority groups in our society.

Evaluating the Sociocultural Perspective

Lending support to the link between social class and psychological disturbance, a classic research study in New Haven, Connecticut, showed that people from the lower socioeconomic groups were more likely to be institutionalized for psychiatric problems (Hollingshead & Redlich, 1958). One reason may be that the poor have less access to private outpatient care.

An alternative view, the **social causation model,** holds that people from lower socioeconomic groups are at greater risk of severe behavior problems because living in poverty subjects them to a greater level of social stress than that faced by more well-to-do people (Costello et al., 2003; Wadsworth & Achenbach, 2005). Yet another view, the **downward drift hypothesis,** suggests that problem behaviors, such as alcoholism, lead people to drift downward in social status, thereby explaining the linkage between low socioeconomic status and severe behavior problems.

social causation model The belief that social stressors, such as poverty, account for the greater risk of severe psychological disorders among people of lower socioeconomic status.

downward drift hypothesis The theory that explains the linkage between low socioeconomic status and behavior problems by suggesting that problem behaviors lead people to drift downward in social status.

Investigators recently had an opportunity to put the social causation model to the test. They focused on mental health problems among children on a Native American (American Indian) reservation both before and after the introduction of a casino. The casino brought considerable wealth to the previously impoverished Indian community, helping many families to rise out of poverty. Prior to the casino, Indian children showed a high rate of problem behaviors and psychiatric symptoms of depression and anxiety. But four years after the money from the casino began to flow to the community, Indian children whose families were no longer below the poverty line showed a significant reduction in problem behaviors. However, levels of anxiety and depression were not reduced. This research lacked the experimental controls needed to firm up evidence of cause and effect, but it lends support to social causation model for at least some forms of problem behavior (Costello et al., 2003; Rutter, 2003).

Sociocultural theorists have focused much needed attention on the social stressors that can lead to abnormal behavior. Throughout the text we consider how sociocultural factors relating to gender, race, ethnicity, and lifestyle inform our understanding of abnormal behavior and our response to people deemed mentally ill. In Chapter 4, we consider how issues relating to race, culture, and ethnicity impact the therapeutic process.

THE BIOPSYCHOSOCIAL PERSPECTIVE

Contemporary views of abnormal behavior are informed by several different models or perspectives representing biological, psychological, and sociocultural perspectives. The fact that there are different ways of looking at the same phenomenon doesn't mean that one model must be right and the others wrong. No one theoretical perspective accounts for the many complex forms of abnormal behavior we encounter in this text. Each perspective contributes something to our understanding, but none offers a complete view. Table 2.3 presents an overview of these perspectives.

The final perspective we discuss, the *biopsychosocial perspective,* takes a broader view of abnormal behavior than the other models. It examines the contributions of multiple factors representing biological, psychological, and sociocultural domains, as well as their interactions, in the development psychological disorders. As we shall see in later chapters, most psychological disorders involve multiple causes, as well as the interactions among them. We are only beginning to unravel the complex web of factors that underlie many of the disorders we discuss in this text. Even disorders that are primarily biological may be influenced by psychological factors, or vice-versa. For example,

Roots of abnormal behavior? Sociocultural theorists believe that the roots of abnormal behavior are found not in the individual but in the social ills of society, such as poverty, social decay, discrimination based on race and gender, and lack of economic opportunity.

some phobias may be learned behaviors that are acquired through experiences in which particular objects became associated with traumatic or painful experiences (see Chapter 6). Yet, some people may inherit certain traits that make them susceptible to the development of acquired or conditioned phobias.

Here we take a closer look at one of the leading examples of a biopsychosocial model, the *diathesis–stress model*, which posits that psychological disorders arise from an interaction of vulnerability factors (primarily biological in nature) and stressful life experiences.

The Diathesis–Stress Model

diathesis–stress model A model that posits that abnormal behavior problems involve the interaction of a vulnerability or predisposition and stressful life events or experiences.

diathesis A vulnerability or predisposition to a particular disorder.

The **diathesis–stress model** was originally developed as a framework for understanding schizophrenia (see Chapter 12). It has since been applied to other psychological disorders, including depression (Lewinsohn, Joiner, & Rohde, 2001). According to this view, psychological disorders, such as schizophrenia, arise from a combination or interaction of a **diathesis** (vulnerability or predisposition, usually genetic in nature) with life stress (see Figure 2.9). Whether the disorder actually develops depends on the type and severity of stressors the person experiences in life. The life stressors that may contribute to the development of disorders include birth complications, trauma or serious illness in childhood, childhood sexual or physical abuse, prolonged unemployment, loss of loved ones, or significant medical problems (Jablensky et al., 2005).

In some cases, people with a diathesis for a particular disorder, say schizophrenia, will remain free of the disorder or will develop a milder form of the disorder if the level of stress in their lives remains low or if they develop effective coping responses for handling the stress they encounter. However, the stronger the diathesis, the less stress is generally needed to trigger the disorder. In some cases the diathesis may be so strong that the disorder develops even under the most benign life circumstances.

Not all diatheses involve a biological vulnerability. A psychological diathesis may increase vulnerability to psychological disorders in the face of stress, such as maladaptive personality traits and dysfunctional thinking patterns that increase the risk of

TABLE 2.3

Perspectives on Abnormal Behavior

	Model	Focus	Key Questions
Biological Perspective	Medical model	Biological underpinnings of abnormal behavior	What role is played by neurotransmitters in abnormal behavior? By genetics? By brain abnormalities?
Psychological Perspective	Psychodynamic models	Unconscious conflicts and motives underlying abnormal behavior	How do particular symptoms represent or symbolize unconscious conflicts? What are the childhood roots of a person's problem?
	Learning models	Learning experiences that shape the development of abnormal behavior	How are abnormal patterns of behavior learned? What role does the environment play in explaining abnormal behavior?
	Humanistic models	Roadblocks that block self-awareness and self-acceptance	How do a person's emotional problems reflect a distorted self-image? What roadblocks did the person encounter in the path toward self-acceptance and self-realization?
	Cognitive models	Faulty thinking underlying abnormal behavior	What styles of thinking characterize people with particular types of psychological disorders? What role do personal beliefs, thoughts, and ways of interpreting events play in the development of abnormal behavior patterns?
Sociocultural Perspective		Social ills, such as poverty, racism, and prolonged unemployment, contributing to the development of abnormal behavior; relationships between abnormal behavior and ethnicity, gender, culture, and socioeconomic level	What relationships exist between social-class status and risks of psychological disorders? Are there gender or ethnic group differences in various disorders? How are these explained? What are the effects of stigmatization of people who are labeled mentally ill?
Biopsychosocial Perspective		Interactions of biological, psychological, and sociocultural factors in the development of abnormal behavior	How might genetic or other factors predispose individuals to psychological disorders in the face of life stress? How do biological, psychological, and sociocultural factors interact in the development of complex patterns of abnormal behavior?

Source: From Nevid, J. S., *Psychology: Concepts and Applications.* Second Edition (Boston: Houghton Mifflin, 2007), p. 56. Reprinted by permission.

developing a particular disorder in the face of stress (Harris & Curtin, 2002; Zvolensky et al., 2005). For example, the tendency to blame oneself for negative life events, such as a divorce or job loss, may put a person at greater risk of developing depression when such events occur (see Chapter 8) (Just, Abramson, & Alloy, 2001).

Evaluating the Biopsychosocial Perspective

The strength of the biopsychosocial model—its very complexity—may also be its greatest weakness. The model holds the view that with few exceptions, psychological disorders or other patterns of abnormal behavior are complex phenomena that arise from multiple causes. We cannot pinpoint any one cause that leads to the development of schizophrenia or panic disorder, for example. In addition, different people may develop the same disorder based on different sets of causal influences. Yet the complexity of understanding the interplay of underlying causes of abnormal behavior patterns should not deter us from the effort. The accumulation of a body of knowledge is a continuing process. We know a great deal more today than we did a few short years ago. We will surely know more in the years ahead.

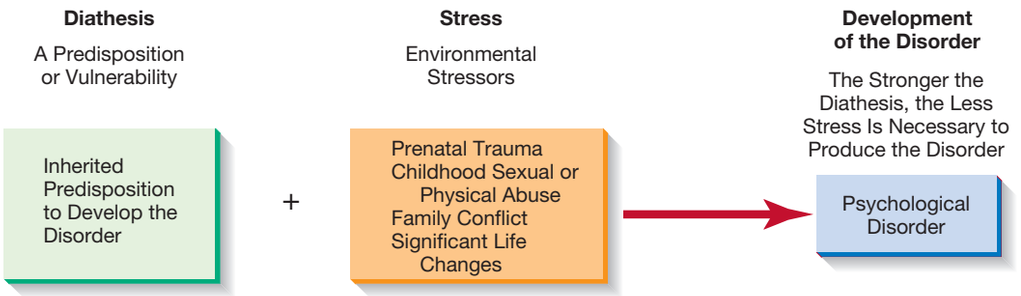


FIGURE 2.9 The diathesis–stress model.

The Case of Jessica—A Final Word

Let us briefly return to the case of Jessica, the young woman with bulimia whom we introduced at the beginning of the chapter. The biopsychosocial model leads us to consider the biological, psychological, and sociocultural factors that might account for bulimic behavior. As we shall consider further in Chapter 10, evidence points to biological influences, such as genetic factors and irregularities in neurotransmitter activity in the brain. Evidence also points to contributions of sociocultural factors, such as the social pressures imposed on young women in our society to adhere to unrealistic standards of thinness, as well as psychological influences such as body dissatisfaction, cognitive factors such as thinking in perfectionistic and dichotomous ("black or white") terms, and underlying emotional and interpersonal problems. In all likelihood, multiple factors interact in leading to bulimia and other eating disorders. For example, we might apply the diathesis–stress model to frame a potential causal model of bulimia. From this perspective, we can propose that a genetic predisposition (diathesis) affecting the regulation of neurotransmitters in the brain interacts in some cases with stress in the form of social and family pressures, leading to the development of eating disorders.

We will return to consider these causal influences in Chapter 10. For now, let us simply note that psychological disorders such as bulimia are complex phenomena that are best approached by considering the contributions and interactions of multiple factors.

SUMMING UP

The Biological Perspective

How is the nervous system organized? The nervous system consists of two major parts, the central nervous system and the peripheral nervous system. The central nervous system consists of the brain and spinal cord. The peripheral nervous system consists of two major divisions, the somatic nervous system, which transmits messages between the central nervous system and the sense organs and muscles, and the autonomic nervous system, which controls involuntary bodily processes. The autonomic nervous system has two branches or subdivisions, the sympathetic and the parasympathetic. The nervous system is composed of neurons, nerve cells that communicate with one another through chemical messengers, called neurotransmitters, that transmit nerve impulses across the tiny gaps, or synapses, between neurons.

What are the biological underpinnings of abnormal behavior?

Biological factors such as disturbances in neurotransmitter functioning in the brain, heredity, and underlying brain abnormalities are implicated in the development of abnormal behavior.

The Psychological Perspective

What are the major psychological models of abnormal behavior?

Psychodynamic perspectives reflect the views of Freud and his followers, who believed that abnormal behavior stemmed from psychological causes based on underlying psychic forces within the personality. Learning theorists posit that the principles of learning can be used to explain both abnormal and normal

behavior. Humanistic theorists believe it is important to understand the obstacles that people encounter as they strive toward self-actualization and authenticity. Cognitive theorists focus on the role of distorted and self-defeating thinking in explaining abnormal behavior.

The Sociocultural Perspective

What is the basic idea underlying the sociocultural perspective on abnormal behavior? Sociocultural theorists believe we need to broaden our outlook on abnormal behavior by taking into account the role of social ills, including poverty, racism, and lack of opportunity, in the development of abnormal behavior patterns.

The Biopsychosocial Perspective

What is the distinguishing feature of the biopsychosocial perspective? The biopsychosocial perspective seeks an understanding of abnormal behavior based on the interplay of biological, psychological, and sociocultural factors.

What is the diathesis–stress model? The diathesis–stress model holds that a person may have a predisposition, or diathesis, for a particular disorder, but whether the disorder actually develops depends on the interaction of the diathesis with stress-inducing life experiences.

KEY TERMS

neurons *(p. 38)*
dendrites *(p. 38)*
axon *(p. 38)*
terminals *(p. 38)*
neurotransmitters *(p. 38)*
synapse *(p. 38)*
receptor site *(p. 40)*
central nervous system *(p. 40)*
peripheral nervous system *(p. 40)*
medulla *(p. 41)*
pons *(p. 41)*
cerebellum *(p. 41)*
reticular activating system *(p. 41)*
thalamus *(p. 42)*
hypothalamus *(p. 42)*
limbic system *(p. 42)*
basal ganglia *(p. 42)*
cerebrum *(p. 42)*
cerebral cortex *(p. 42)*
somatic nervous system *(p. 43)*
autonomic nervous system *(p. 43)*
sympathetic *(p. 43)*
parasympathetic *(p. 43)*
psychoanalytic theory *(p. 45)*
conscious *(p. 45)*
preconscious *(p. 45)*
unconscious *(p. 45)*
id *(p. 46)*
pleasure principle *(p. 46)*
ego *(p. 46)*
reality principle *(p. 46)*
superego *(p. 46)*
defense mechanisms *(p. 46)*
fixation *(p. 48)*
archetypes *(p. 49)*
ego psychology *(p. 49)*
object-relations theory *(p. 50)*
psychosis *(p. 51)*
behaviorism *(p. 52)*
conditioned response *(p. 53)*
unconditioned stimulus *(p. 53)*
unconditioned response *(p. 53)*
conditioned stimulus *(p. 53)*
classical conditioning *(p. 53)*
operant conditioning *(p. 54)*
reinforcement *(p. 54)*
positive reinforcers *(p. 54)*
negative reinforcers *(p. 54)*
punishment *(p. 55)*
social-cognitive theory *(p. 55)*
modeling *(p. 55)*
expectancies *(p. 55)*
self-actualization *(p. 56)*
unconditional positive regard *(p. 56)*
conditional positive regard *(p. 56)*
social causation model *(p. 63)*
downward drift hypothesis *(p. 63)*
diathesis–stress model *(p. 64)*
diathesis *(p. 64)*

MEDIA TOOLS

A variety of digital and online learning tools are available to enrich your learning experience and help you succeed in the course. These resources include:

- **MyPsychLab,** an online learning system for your course in abnormal psychology that allows you to test your mastery of concepts in the book by using chapter-by-chapter diagnostic tests. Results from the diagnostic tests help you build a customized study plan. To access **MyPsychLab,** visit www.prenhall.com/mypsychlab and follow the instructions on the site.
- **"SPEAKING OUT" PATIENT INTERVIEWS,** a set of video case examples of actual patients you can access on the companion CD-ROM included with the text. Icons in the margins of the chapter highlight the video case examples included on the CD-ROM.
- **COMPANION WEB SITE,** an online study center that offers computer-scored quizzes you can use to test your knowledge, along with other study tools and links to related sites to enhance your learning of abnormal psychology. To access the companion web site, visit www.prenhall.com/nevid and use the various tabs and links on the site to access these learning resources.