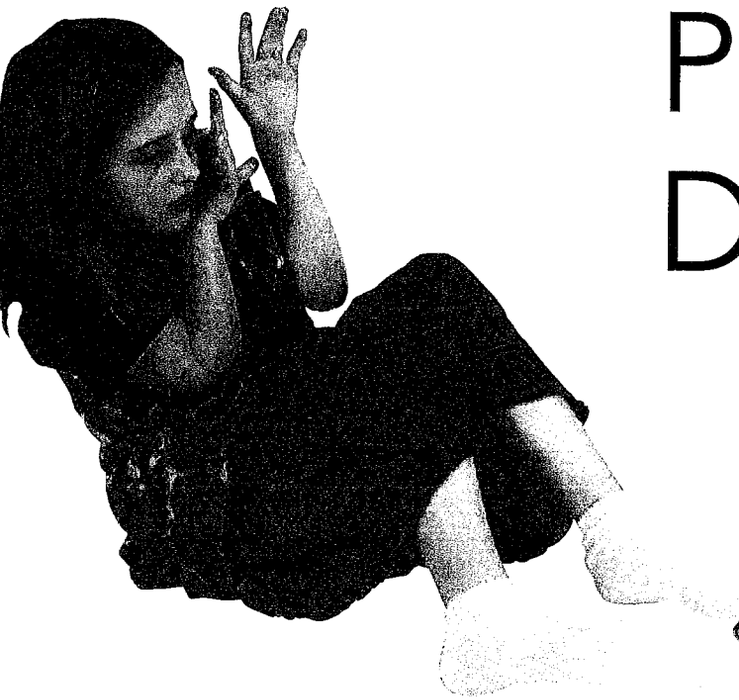
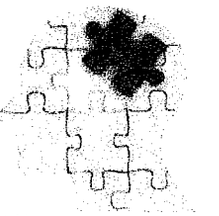
chapter twelve



Psychological Disorders



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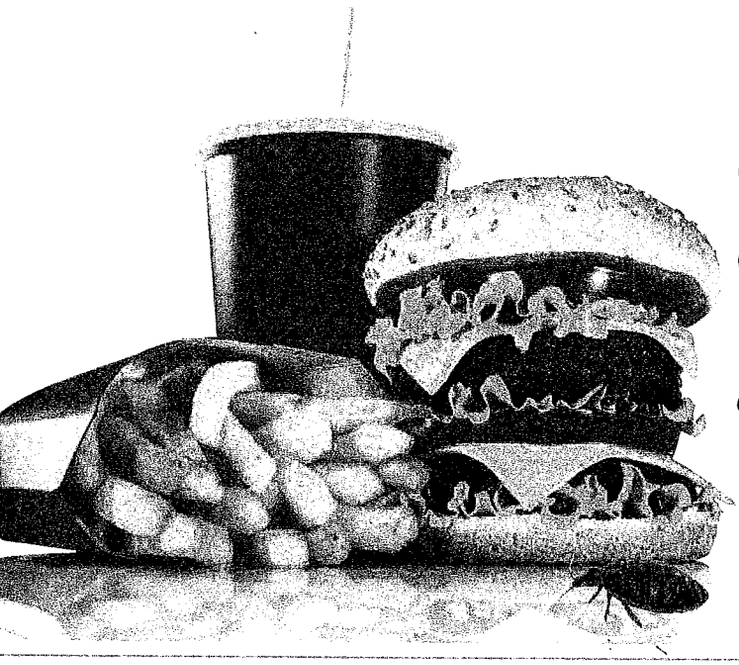
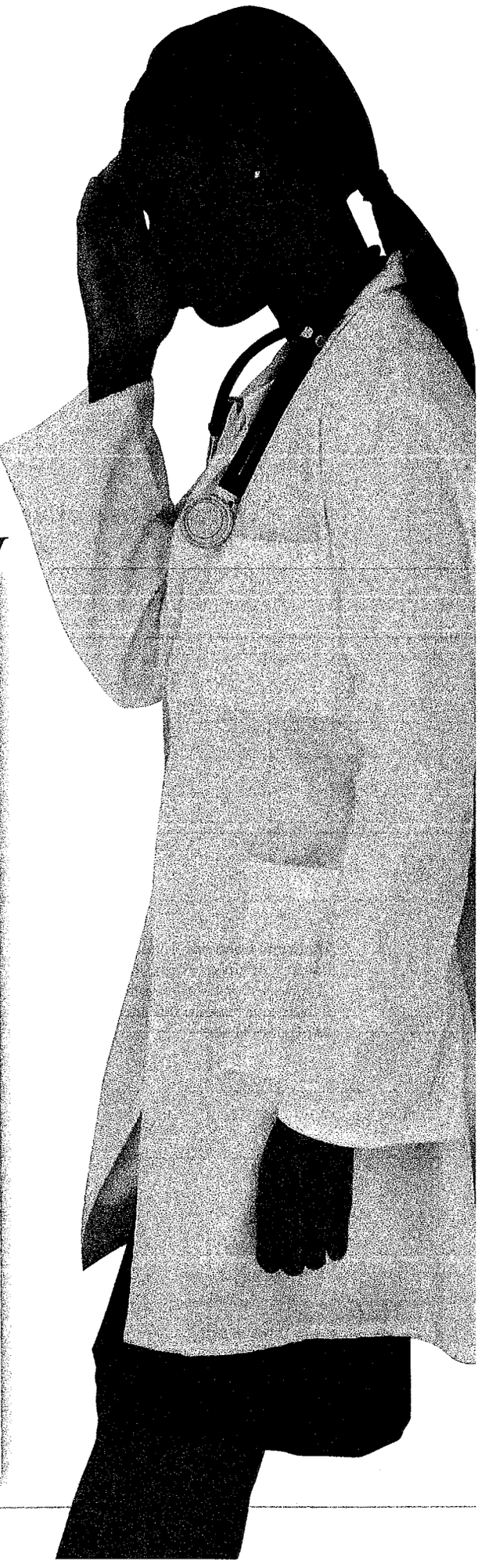




realworldpsychology

THINGS YOU'LL LEARN IN CHAPTER 12

Q1 **How can media coverage of mass shootings create negative misperceptions about people with mental illness?**

Q2 **Do people with a phobia see the object that frightens them as larger than it really is?**

Q3 **Can eating fast food lead to depression later on?**

Q4 **Why might children who experience trauma be at increased risk of developing schizophrenia later in life?**

Q5 **How do changes in the brain help explain severe antisocial personality disorder?**

Q6 **Are symptoms of depression in women more distressing, deserving of sympathy, and difficult to treat than the same signs in men?**

THROUGHOUT THE CHAPTER, MARGIN ICONS FOR Q1–Q6 INDICATE WHERE THE TEXT ADDRESSES THESE QUESTIONS.

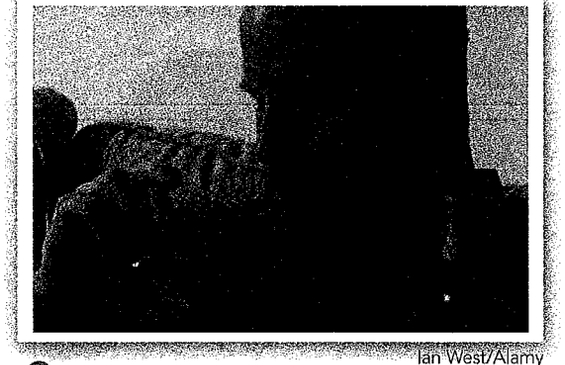
Frightened girl: © IvonneW/iStockphoto; Puzzle head: © alexsl/iStockphoto;
Fast Food: © cookelma/iStockphoto; Bug: © animatedfunk/iStockphoto; Pistol: © gbautista87/iStockphoto; Microphones: © Talaj/iStockphoto; Stressed woman: © Yuri_Arcurs/iStockphoto

FIGURE 12.1 FOUR CRITERIA FOR IDENTIFYING ABNORMAL BEHAVIOR

Behavior may be considered abnormal if it meets one or more of these four criteria.

Corbis Flirt/Alamy

A Deviance
Behaviors, thoughts, or emotions may be considered abnormal when they deviate from a society or culture's norms or values. For example, it's normal to be a bit concerned if friends are whispering, but abnormal if you're equally concerned when total strangers are whispering.



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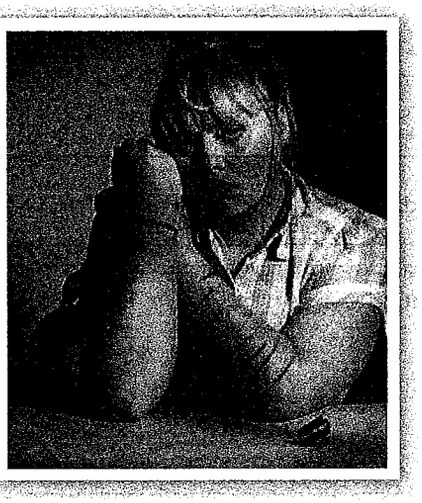
B Dysfunction
When someone's dysfunction interferes with his or her daily functioning, such as drinking to the point that you cannot hold a job, stay in school, or maintain relationships, it would be considered abnormal behavior.



Peter Dazeley /Photographer'sChoice/Getty Image, Inc.

C Distress
Behaviors, thoughts, or emotions that cause significant personal distress may qualify as abnormal. Self-abuse, relationship problems, and suicidal thoughts all indicate serious personal distress and unhappiness.

D Danger
If someone's thoughts, emotions, or behaviors present a danger to self or others, such as engaging in road rage to the point of physical confrontation, it would be considered abnormal.

Digital Vision/Getty Images

TABLE 12.1 COMMON MYTHS ABOUT MENTAL ILLNESS | realworldpsychology

- ***Myth: Mentally ill people are often dangerous and unpredictable.***

  Fact: Only a few disorders, such as some psychotic and antisocial personality disorders, are associated with violence. The stereotype that connects mental illness and violence persists because of prejudice, selective media attention, and negative portrayals in movies and on television.

- ***Myth: People with psychological disorders act in bizarre ways and are very different from normal people.***

  Fact: This is true for only a small minority of individuals and during a relatively brief portion of their lives. In fact, sometimes even mental health professionals find it difficult to distinguish normal from abnormal behaviors without formal screening.

- ***Myth: Mental disorders are a sign of personal weakness.***

  Fact: Psychological disorders are a function of many factors, such as exposure to stress, genetic predispositions, a host of personal and sociocultural experiences., and family background. Mentally disturbed individuals can't be blamed for their illness any more than we blame people who develop cancer or other illnesses.

- ***Myth: A mentally ill person is only suited for low-level jobs and never fully recovers.***

  Fact: Like all other illnesses, mental disorders are complex, and their symptoms, severity, and prognoses differ for each individual. With therapy, the vast majority of those who are diagnosed as mentally ill eventually improve and lead normal, productive lives. Moreover, the extreme symptoms of some mental disorders are generally only temporary. For example, U.S. President Abraham Lincoln, British Prime Minister Winston Churchill, scientist Isaac Newton, and other high achieving people all suffered from serious mental disorders at various times throughout their careers.

Boris Roessler/AFP/Getty Images

Is this behavior abnormal? Eccentric? Yes. Mentally disordered? Probably not.

Sources: Barnow & Balkin, 2013; Famous people with mental illness, 2011; Famous people with schizophrenia, 2011; Hooley et al., 2013; Lilienfeld et al., 2010.

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FIGURE 12.3 THE INSANITY PLEA—GUILTY OF A CRIME OR MENTALLY ILL?

On March 27, 2012, JetBlue Airways captain Clayton Osbon dangerously disrupted a cross-country flight by running through the cabin, screaming about terrorists and religion. He was later charged with interference with a flight crew and was found not guilty by reason of insanity after a neuropsychologist testified that he had a "brief psychotic disorder" brought on by lack of sleep. Osbon was allowed to go free but with several restrictions, including not being allowed to fly or board any commercial or private planes. The insanity plea is used in fewer than 1% of all cases that reach trial and is successful in only a fraction of those (Claydon, 2012; Dirks-Linhorst, 2013; Goldstein et al., 2013).

mental health specialists share a uniform classification system, the ***Diagnostic and Statistical Manual of Mental Disorders* (DSM)**. This manual has been updated and revised several times, and the latest, fifth edition, was published in 2013 (American Psychiatric Association, 2013).

Each revision of the *DSM* has expanded the list of disorders and changed the descriptions and categories to reflect both the latest in scientific research and any changes in the way abnormal behaviors are viewed within our social context (Hauser & Johnston, 2013; Widiger, 2013). For example, take the terms **neurosis** and **psychosis**. In previous editions of the *DSM*, the term *neurosis* reflected Freud's belief that all neurotic conditions arise from unconscious conflicts (Chapter 11). Now, conditions that were previously grouped under the heading *neurosis* have been formally studied and redistributed as separate categories. Unlike neurosis, the term *psychosis* is still listed in the current edition of the *DSM* because it remains useful for distinguishing the most severe mental disorders, such as schizophrenia.

What about the term *insanity*? Where does it fit in? **Insanity** is a legal term indicating that a person cannot be held responsible for his or her actions or is incompetent to manage his or her own affairs because of mental illness. In the law, the definition of mental illness rests primarily on a person's inability to tell right from wrong **(Figure 12.3)**.

Diagnostic and Statistical Manual of Mental Disorders (DSM) A classification system developed by the American Psychiatric Association that is used to describe abnormal behaviors.

Neurosis An outmoded term and category dropped from earlier versions of the DSM, in which a person does not have signs of brain abnormalities and does not display grossly irrational thinking or violate basic norms but does experience subjective distress.

Psychosis A serious mental disorder characterized by extreme mental disruption and defective or lost contact with reality.

Insanity The legal (not clinical) designation for the state of an individual judged to be legally irresponsible or incompetent to manage his or her own affairs because of mental illness.

Comorbidity The co-occurrence of two or more disorders in the same person at the same time, as when a person suffers from both depression and alcoholism.

Understanding and Evaluating the *DSM*

To understand a disorder, we must first name and describe it. The *DSM* identifies and describes the symptoms of approximately 400 disorders, which are grouped into 22 categories **(Table 12.2)**. Note that we focus on only the first 7 in this chapter (categories 8-14 are discussed in other chapters; 15-22 are beyond the scope of this book). Also, keep in mind that people may be diagnosed with more than one disorder at a time, a condition referred to as **comorbidity**.

Classification and diagnosis of mental disorders are essential to scientific study. Without a system such as the *DSM*, we could not effectively identify and diagnose the wide variety of disorders, predict their future courses, or suggest appropriate treatment. The *DSM* also facilitates communication among professionals and patients, and it serves as a valuable educational tool.

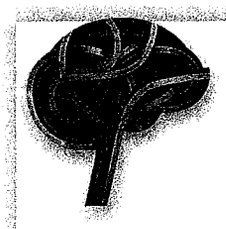
Unfortunately, the *DSM* does have limitations and potential problems. For example, critics suggest that it may be casting too wide a net and *overdiagnosing*. Given that insurance companies compensate physicians and psychologists only if each client is assigned a specific *DSM* code number, can you see how compilers of the *DSM* may be encouraged to add more diagnoses?

In addition, the *DSM* has been criticized for a potential *cultural bias*. It does provide a culture-specific section and a glossary of culture-bound syndromes, such as *amok* (Indonesia), *genital retraction syndrome* (Asia), and *windigo psychosis* (First Nations' cultures), which we discuss later in this chapter. However, the overall classification still reflects a Western European and U.S. perspective (Gellerman & Lu, 2011; Malhi, 2013; Sachdev, 2013).

Perhaps the most troubling criticism of the *DSM* is its possible overreliance on the medical model and the way it may unfairly label people. Consider the classic study conducted by David Rosenhan (1973) in which he and his seven colleagues presented themselves at several hospital admissions offices complaining of hearing voices (a classic symptom of schizophrenia). Aside from making this single false complaint

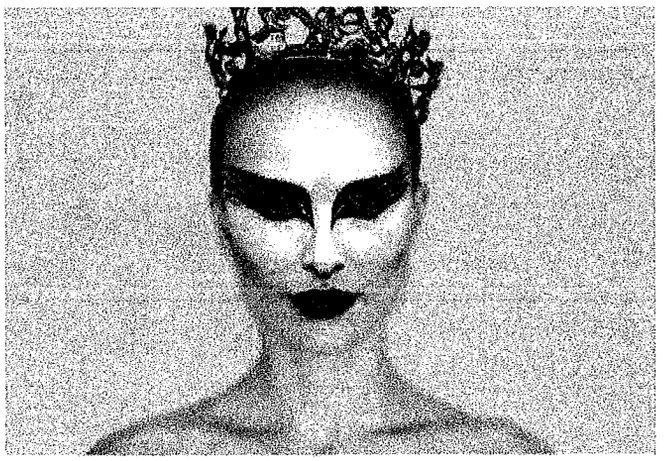
and providing false names and occupations, the researchers answered all questions truthfully. Not surprisingly, given their reported symptom, they were all diagnosed with mental disorders and admitted to the hospital. Once there, the "patients" stopped reporting any symptoms and behaved as they normally would, yet none were ever recognized by hospital staff as phony. Note that all of them were eventually released, after an average stay of 19 days, but only with a label on their permanent record of "schizophrenia in remission." Can you see the inherent dangers and "stickiness" of all forms of labels? Once the label "nerd," "jock," "criminal," or "mental patient" is applied, they may become self-fulfilling, and in the case of "criminal" or "mentally ill," they involve serious legal and employment issues.

Having noted the real and potential dangers of the label of mental illness, we need to explore a very common *Psych Science* question before going on: Are creative people at increased risk of suffering from mental illness?



PSYCHSCIENCE

CREATIVITY AND MENTAL DISORDERS



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What do you picture when you think of a creative genius? Thanks to movies, television, and novels, many people share the stereotypical image of an eccentric inventor or deranged artist, like the lead ballerina in the film *Black Swan*.

Is there an actual link between creativity and mental disorders? Researchers interested in this question collected data from more than 1 million people, including their specific professions, whether they had ever been diagnosed and treated for a mental disorder, and if so what type (Kyaga et al., 2012). Kyaga and his colleagues found that individuals in generally creative professions (scientific or artistic) were no more likely to suffer from investigated psychiatric disorders than control subjects. However, bipolar disorder was significantly more common in artists and scientists, and particularly in authors.

What do you think? How would you explain this intriguing association between certain creative professions and bipolar disorder? Does the manic phase of bipolar disorder increase the energy levels of artists, scientists, and authors, giving them greater access to creative ideas than they would otherwise have? Or does it interfere with their overall output? Can you see how variables like choice of occupation might confound these results (Patra & Balhara, 2012)? As you'll discover later in this chapter, there is a strong genetic component in bipolar disorders. And, just as you are much more likely to enter a profession similar to that of your parents because of familiarity, access, and modeling, children of artists, scientists, and authors are more likely to choose similar professions—thus possibly explaining the link between creativity and mental illness.

If you find these questions fascinating and the lack of answers frustrating, you may be the perfect candidate for a career as a research psychologist. Recall from Chapter 1 that the scientific method is circular and never-ending—but guaranteed to excite!

RESEARCH CHALLENGE

1. Based on the information provided, did this study (Kyaga et al., 2012) use descriptive, correlational, and/or experimental research?
2. If you chose:
   - descriptive research, is this a naturalistic observation, survey/interview, case study, or archival research?
   - correlational research, is this a positive, negative, or zero correlation?
   - experimental research, label the IV, DV, experimental group(s), and control group.

>>CHECK YOUR ANSWERS IN APPENDIX B.

NOTE: The information provided in this study is admittedly limited, but the level of detail is similar to what is presented in most textbooks and public reports of research findings. Answering these questions, and then comparing your answers to those in the Appendix, will help you become a better critical thinker and consumer of scientific research.

realworldpsychology **Coping with Anxiety Disorders** What would you do if you were a promising new professional basketball player expected to fly all over the country with your team but suffered from an intense fear of flying? This is just one of the many challenges facing NBA rookie player Royce White, who speaks openly about his illness and personal experiences, hoping to boost public awareness of mental illness. Although twice as many women as men are diagnosed with anxiety disorders, men like White also suffer from this widespread disease. In fact, anxiety disorders are the most frequently occurring mental disorders in the general population (Essau & Petermann, 2013; National Institute of Mental Health, 2011; Zerr et al., 2011).

Albert Pena/Cal Sport Media/NewsCom

Describing Anxiety Disorders

In this section, we discuss three anxiety disorders: *generalized anxiety disorder* (GAD), *panic disorder*, and *phobias* **(Figure 12.4)**. Although we cover these disorders separately, two or more often occur together (Corr, 2011; Johnston et al., 2013; Leyfer et al., 2013).

Generalized Anxiety Disorder

Sufferers of **generalized anxiety disorder (GAD)** experience fear and worries that are not focused on any one specific threat, which is why it's referred to as *generalized* (Hooley et al., 2013; Robichaud, 2013; Zink et al., 2013). Their anxiety also is chronic and uncontrollable and lasts at least six months. Because of persistent muscle tension and autonomic fear reactions, people with this disorder may develop headaches, heart palpitations, dizziness, and insomnia, making it even harder to cope with normal daily activities. The disorder affects twice as many women as men (Horwath & Gould, 2011).

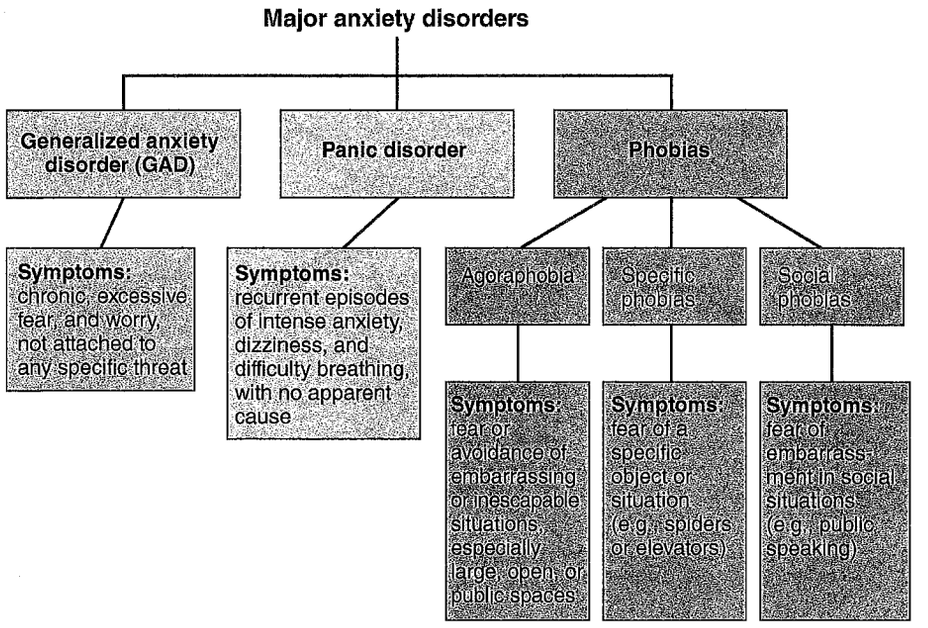
Generalized anxiety disorder (GAD) An anxiety disorder characterized by persistent, uncontrollable, and free-floating, nonspecified anxiety.

Panic Disorder

Sudden but brief attacks of intense apprehension that cause trembling, dizziness, and difficulty breathing are symptoms of **panic disorder**. *Panic attacks* generally happen after frightening experiences or prolonged stress (and sometimes even after exercise). Panic disorder is diagnosed when several apparently spontaneous panic

Panic disorder An anxiety disorder in which sufferers experience sudden and inexplicable panic attacks; symptoms include difficulty breathing, heart palpitations, dizziness, trembling, terror, and feelings of impending doom.

FIGURE 12.4 ANXIETY DISORDERS



Psychological Factors

Researchers generally agree on the two major psychological contributions to anxiety disorders: *faulty cognitive processes* and *maladaptive learning*.

People with anxiety disorders tend to have habits of thinking, or cognitive processes, that make them prone to fear. These faulty cognitions tend to make them hypervigilant—meaning they constantly scan their environment for signs of danger and ignore signs of safety. They also tend to magnify ordinary threats and failures and to be hypersensitive to others' opinions of them.

In contrast to this cognitive explanation, learning theorists (Chapter 6) suggest that anxiety disorders result from maladaptive learning, such as inadvertent and improper conditioning and social learning (Gazendam et al., 2013; Grills-Taquechel & Ollendick, 2013; Lovibond, 2011). During classical conditioning, for example, a stimulus that is originally neutral, such as a harmless spider, becomes paired with a frightening event, such as a sudden panic attack. The harmless spider becomes a conditioned stimulus that elicits anxiety. The person then begins to avoid spiders in order to reduce anxiety (an operant conditioning process known as negative reinforcement). See **Figure 12.7**.

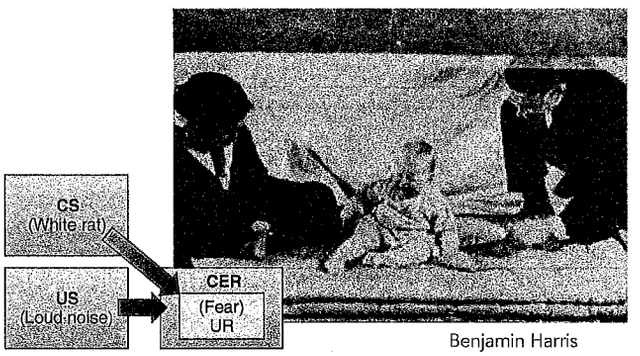
Some researchers contend that because most people with phobias cannot remember a specific instance that led to their fear, and because frightening experiences do not always trigger phobias, conditioning may not be the only explanation. Social learning theorists propose that some phobias result from modeling and imitation. For example, children whose parents, especially fathers, are afraid of going to the dentist are much more likely to also have such a fear themselves (Lara-Sacido et al., 2012).

Biological Factors

Some researchers believe phobias reflect an evolutionary predisposition to fear things that were dangerous to our ancestors (Beckers et al., 2013; Glover, 2011; Mineka & Oehlberg, 2008; Noggle & Dean, 2013; Soares & Esteves, 2013). Some people with panic disorder also seem genetically predisposed toward an overreaction of the autonomic nervous system, further supporting the argument for a biological

FIGURE 12.7 CONDITIONING AND PHOBIAS

Classical conditioning combined with operant conditioning can lead to phobias. Consider the example of Little Albert's classically conditioned fear of rats, discussed in Chapter 6.



A Classical conditioning
By pairing the white rat with a loud noise, experimenters used classical conditioning to teach Little Albert to fear rats.

B Operant conditioning
Later Albert might have learned to avoid rats through operant conditioning. Avoiding rats would reduce Albert's fear, giving unintended reinforcement to his fearful behavior.

C Phobia
Over time, this cycle of fear and avoidance could produce an even more severe fear, or phobia.

DEPRESSIVE AND BIPOLAR DISORDERS

RETRIEVAL PRACTICE While reading the upcoming sections, respond to each Learning Objective in your own words. Then compare your responses with those found at www.wiley.com/college/huffman.

LEARNING OBJECTIVES

1. **EXPLAIN** how depressive disorders and bipolar disorders differ.
2. **SUMMARIZE** research on the biological and psychological factors that contribute to depressive and bipolar disorders.
3. **DISCUSS** what to do if someone is suicidal.

Both depressive disorders and bipolar disorders are characterized by extreme disturbances in emotional states.

Describing Depressive and Bipolar Disorders

We all feel "blue" sometimes—especially following the loss of a job, end of a relationship, or death of a loved one. People suffering from **depressive disorders**, however, are so deeply sad and discouraged that they often have trouble sleeping, are likely to lose (or gain) significant weight, and may feel so fatigued that they cannot go to work or school or even comb their hair and brush their teeth. They may sleep constantly, have problems concentrating, and feel so profoundly sad and guilty that they consider suicide. Seriously depressed individuals have a hard time thinking clearly or recognizing their own problems (Hammen & Keenan-Miller, 2013; Wyrobeck et al., 2013).

Depressive disorders A group of mental disorders, including major depressive disorder, characterized by sad, empty, or irritable moods that interfere with the ability to function.

realworldpsychology **Hollywood's Depiction of Bipolar Disorder**

Did you know that the Oscar nominated film *Silver Linings Playbook* was originally a gift from the director to his son, Matthew, who suffers from *bipolar disorder*? Viewers and mental health professionals, however, all agree that it's a gift for all because it casts a sensitive subject in a warmer light and helps offset the stigma so commonly associated with mental illness (Lopez, 2013).

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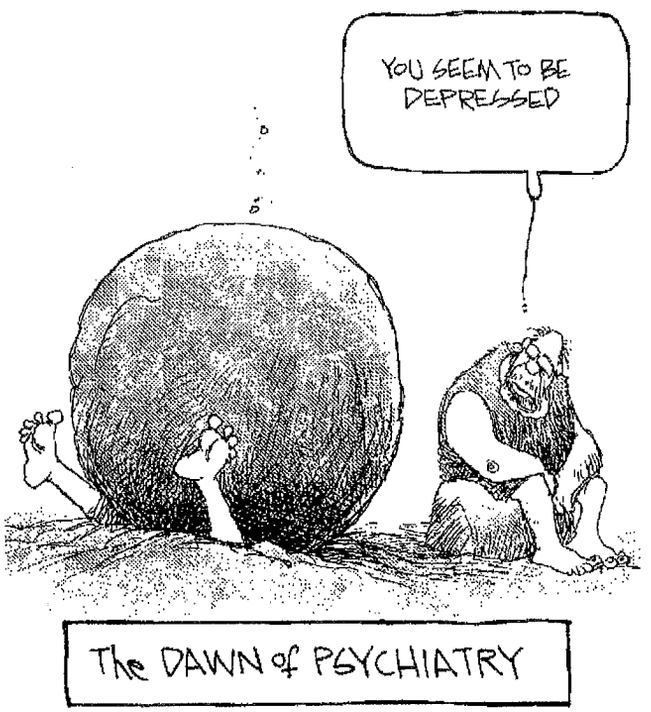

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TEST YOURSELF: DANGER SIGNS FOR SUICIDE

psychology and you

Let's begin with a measure of your own symptoms of depression. Answer the following questions, based on how you have been feeling over the past two weeks. Use a scale of 1 = at no time to 6 = all the time.

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Have you felt low in spirits or sad?

Have you lost interest in your daily activities?

Have you felt lacking in energy and strength?

Have you felt less self-confident?

Have you had a bad conscience or feelings of guilt?

Have you felt that life wasn't worth living?

Have you had difficulty concentrating?

Have you felt very restless?

Have you felt subdued or slowed down?

Have you had trouble sleeping at night?

Have you suffered from reduced appetite?

Have you suffered from increased appetite?

Higher numbers on this scale indicate higher levels of depression (Bech et al., 2011; Olsen et al., 2003). If you're currently feeling suicidal, seek help immediately! If not, read on about some misconceptions and stereotypes surrounding suicide. Can you correctly identify which of the following is true or false?

1. People who talk about suicide are less likely to commit suicide.
2. Suicide usually takes place with little or no warning.
3. Suicidal people are fully intent on dying.
4. Children of parents who attempt suicide are at greater risk of committing suicide.
5. Suicidal people remain so forever.
6. Men are more likely than women to actually kill themselves by suicide.
7. When a suicidal person has been severely depressed and seems to be "snapping out of it," the danger of suicide decreases substantially.
8. Only depressed people commit suicide.
9. Thinking about suicide is rare.
10. Asking a depressed person about suicide will push him or her over the edge and cause a suicidal act that would not otherwise have occurred.

Now, compare your responses to the experts' answers and explanations (Bailey et al., 2011; Baldessarini & Tondo, 2008; Callanan & Davis, 2012; Lilienfeld et al., 2010; Schneidman, 1981; Stricker et al., 2013; Taub & Thompson, 2013; Walsh et al., 2013).

1. and **2. False**. Up to three-quarters of those who take their own lives talk about it and give warnings about their intentions beforehand. They may say, "If something happens to me, I want you to . . . " or "Life just isn't worth living." They also provide behavioral clues, such as giving away valued possessions, withdrawing from family and friends, and losing interest in favorite activities.
3. **False**. Only about 3 to 5% of suicidal people truly intend to die. Most are just unsure about how to go on living. They cannot see their problems objectively enough to realize that they have alternative courses of action. They often gamble with death, arranging it so that fate or others will save them. Moreover, once the suicidal crisis passes, they are generally grateful to be alive.
4. **True**. Children of parents who attempt or commit suicide are at much greater risk of following in their footsteps. As Schneidman (1969) puts it, "The person who commits suicide puts his psychological skeleton in the survivor's emotional closet" (p. 225).
5. **False**. People who want to kill themselves are usually suicidal only for a limited period.
6. **True**. Although women are much more likely to attempt suicide, men are far more likely to actually commit it. This is true because men generally use more effective and stronger methods, such as guns instead of pills.

Psychosocial theories of depression focus on environmental stressors, disturbances in the person's interpersonal relationships or self-concept, and on any history of abuse or assault (Betancourt et al., 2011; Herrenkohl et al., 2013; Jewkes, 2013; Mendelson et al., 2011; Mota et al., 2012; Neri et al., 2012). The psychoanalytic explanation sees depression as the result of experiencing a real or imagined loss, which is internalized as guilt, shame, self-hatred and ultimately self-blame. The cognitive perspective explains depression as caused, at least in part, by negative thinking patterns, including a tendency to ruminate, or obsess, about problems (Brinker et al., 2013; Demeyer et al., 2012; Gibb et al., 2012). The humanistic school says that depression results when a person demands perfection of him- or herself or when positive growth is blocked (Keen, 2011; O'Connell, 2008; Stricker et al., 2013).

According to the **learned helplessness** theory (Seligman, 1975, 2007), depression occurs when people (and other animals) become resigned to the idea that they are helpless to escape from something painful. Learned helplessness may be particularly likely to trigger depression if the person attributes failure to causes that are internal ("my own weakness"), stable ("this weakness is long-standing and unchanging"), and global ("this weakness is a problem in lots of settings") (Alloy et al., 2011; Barnum et al., 2013; Newby & Moulds, 2011; Reivich et al., 2013).

Learned helplessness Seligman's term for a state of helplessness or resignation, in which human or nonhuman animals learn that escape from something painful is impossible; the organism stops responding and may become depressed.

Keep in mind that suicide is a major danger associated with both depressive disorder and bipolar disorder. Given that some people who suffer with these disorders are so disturbed that they lose contact with reality, they may fail to recognize the danger signs or to seek help. *What To Do If You Think Someone Is Suicidal* offers important information for both the sufferers and their family and friends.

WHAT TO DO IF YOU THINK SOMEONE IS SUICIDAL

psychology and you

If you believe someone is contemplating suicide, act on your beliefs. Stay with the person if there is any immediate danger. Encourage him or her to talk to you rather than withdraw. Show the person that you care but do not give false reassurances that "everything will be okay." This type of response may make the suicidal person feel *more* alienated. Instead, openly ask whether the person is feeling hopeless and suicidal. Do not be afraid to discuss suicide with people who feel depressed or hopeless, fearing that you will put ideas into their heads. The reality is that people who are left alone or who are told they can't be serious about suicide often attempt it.

If you suspect that someone is imminently suicidal, it is vitally important that you help the person obtain counseling. Get help immediately! Consider calling the police for emergency intervention, the person's therapist, and/or the toll-free 24/7 hotline 1-800-SUICIDE (784-2433). Most cities also have walk-in centers that provide emergency counseling.

In addition, share your suspicions with parents, friends, or others who can help in a suicidal crisis. To save a life, you may have to betray a secret when someone confides in you. If you feel you can't do this alone, get another person to help you.

Mirek Towski/DMI/Time LifePictures/Getty Images

Even people who enjoy fame and success may be at risk for suicide. Famous musicians like Mindy McCready (pictured here) and Kurt Cobain; professional athletes such as Olympic medalist Jeret Peterson, or football player Junior Seau; and well known writers or artists like Hunter S. Thompson, Virginia Woolf, Ernest Hemingway, and Vincent van Gogh have all died as a result of suicide.

approximately half of all people who are admitted to mental hospitals are diagnosed with this disorder (Gottesman, 1991; Harvey & Bowie, 2013; Kessler et al., 1994; Regier et al., 1993). Schizophrenia usually emerges between the late teens and the mid-30s and only rarely prior to adolescence or after age 45. It seems to be equally prevalent in men and women, but it's generally more severe and strikes earlier in men (Chang et al., 2011; Goldstein et al., 2013; Gottesman, 1991; Harvey & Bowie, 2013; Lee et al., 2011).

Many people confuse schizophrenia with dissociative identity disorder, which is sometimes referred to as *split* or *multiple personality disorder* (see *Real World Psychology*). *Schizophrenia* means "split mind," but when Eugen Bleuler coined the term in 1911, he was referring to the fragmenting of thought processes and emotions, not of personalities (Neale et al., 1983). As we discuss later in this chapter, dissociative identity disorder is popularly referred to as having a "split personality"—the rare and controversial condition of having more than one distinct personality.

realworldpsychology **Do People with Schizophrenia Have Multiple Personalities?** As shown in this cartoon and in popular movies and television shows, schizophrenia is commonly confused with *multiple personality disorder* (now known as *dissociative identity disorder*, p. 357). This widespread error persists in part because of confusing terminology. Literally translated, *schizophrenia* means "split mind," referring to a split from reality that shows itself in disturbed perceptions, language, thought, emotions, and/or behavior.

In contrast, dissociative identity disorder (DID) refers to the condition in which two or more distinct personalities exist within the same person at different times. People with schizophrenia have only one personality.

Why does this matter? Confusing schizophrenia with multiple personalities is not only technically incorrect, it also trivializes the devastating effects of both disorders, which may include severe anxiety, social isolation, unemployment, homelessness, substance abuse, clinical depression, and even suicide (Lilienfeld et al., 2010; Preventing Suicide, 2009; Smith et al., 2011; Stricker et al., 2013).

Symptoms of Schizophrenia

Schizophrenia is a group of disorders characterized by a disturbance in one or more of the following areas: *perception*, *language*, *thought*, *affect* (emotions), and *behavior*.

Perception

The senses of people with schizophrenia may be either enhanced or blunted. The filtering and selection processes that allow most people to concentrate on whatever they choose are impaired, and sensory stimulation is jumbled and distorted. People with schizophrenia may also experience **hallucinations**, false, imaginary sensory perceptions that occur without external stimuli. Auditory hallucinations (hearing voices and sounds) is one of the most commonly noted and reported symptoms of schizophrenia.

Hallucination A false, imaginary sensory perception that occurs without an external, objective source.

On rare occasions, people with schizophrenia hurt others in response to their distorted perceptions. But a person with schizophrenia is more likely to be self-destructive and suicidal than violent toward others.

Language and Thought

For people with schizophrenia, words lose their usual meanings and associations, logic is impaired, and thoughts are disorganized and bizarre. When language and thought disturbances are mild, the individual jumps from topic to topic. With more

Explaining Schizophrenia

Because schizophrenia comes in many different forms, it probably has multiple biological and psychosocial bases. Let's look at biological contributions first.

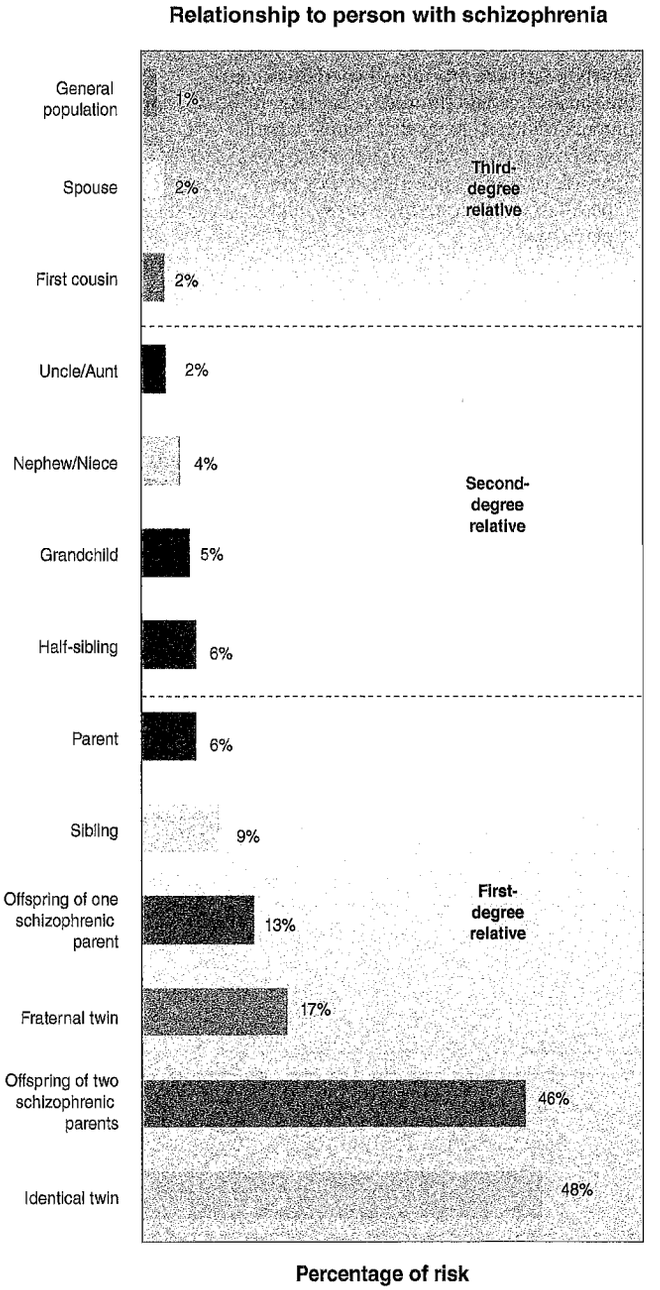
Prenatal stress and viral infections, birth complications, immune responses, maternal malnutrition, and advanced paternal age all may contribute to the development of schizophrenia (Kneeland & Fatemi, 2013; Miller et al., 2013; Noggle & Dean, 2013; Weinberger & Harrison, 2011). However, most biological theories of schizophrenia focus on genetics, neurotransmitters, and brain abnormalities:

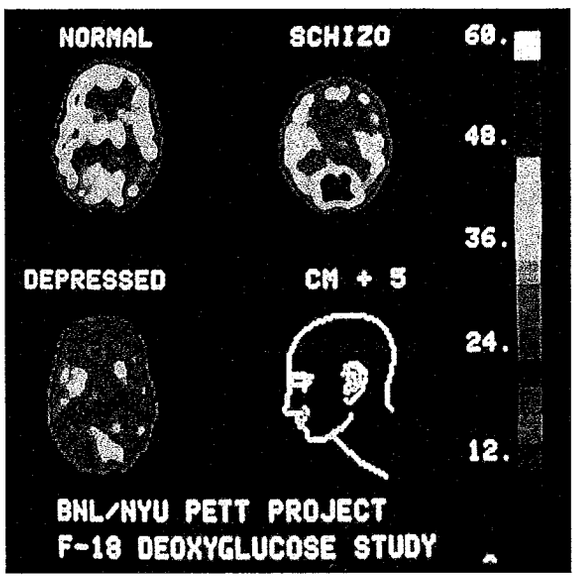
- **Genetics** Although researchers are beginning to identify specific genes related to schizophrenia, most genetic studies have focused on twins and adoptions (Drew et al., 2011; Gilman et al., 2012; Owens et al., 2011; Svrakic et al., 2013; Wiener et al., 2013). This research indicates that the risk for schizophrenia increases with genetic similarity; that is, people who share more genes with a person who has schizophrenia are more likely to develop the disorder **(Figure 12.10)**.
- **Neurotransmitters** Precisely how genetic inheritance produces schizophrenia is unclear. According to the *dopamine hypothesis*, overactivity of certain dopamine neurons in the brain causes some forms of schizophrenia (Fusar-Poli & Meyer-Lindenberg, 2013; Madras, 2013; Nord & Farde, 2011; Sokoloff et al., 2013). This hypothesis is based on two observations. First, administering amphetamines increases the amount of dopamine and can produce (or worsen) some symptoms of schizophrenia, especially in people with a genetic predisposition to the disorder. Second, drugs that reduce dopamine activity in the brain reduce or eliminate some symptoms of schizophrenia.
- **Brain abnormalities** A third major biological theory for schizophrenia looks at abnormalities in brain function and structure. Researchers have found larger cerebral ventricles (fluid-filled spaces in the brain) in some people with schizophrenia (Agartz et al., 2011; Fusar-Poli et al., 2011; Pepe et al., 2013).

Also, some people with chronic schizophrenia have a lower level of activity in their frontal and temporal lobes—areas we use in language, attention, and memory **(Figure 12.11)**. Damage in

FIGURE 12.10 GENETICS AND SCHIZOPHRENIA

Biological relatives of people with schizophrenia have a higher risk than the general population of developing the disorder during their lifetimes. Closer relatives (who have a more similar genetic makeup) have a greater risk than more distant relatives (Gottesman, 1991).





Science Source/Photo Researchers, Inc.

FIGURE 12.11 BRAIN ACTIVITY IN SCHIZOPHRENIA

Using these positron emission tomography (PET) scans, compare the normal levels of brain activity (upper left) with those of a person with schizophrenia (upper right), and then with those of a person with depression (lower left). Warmer colors (reds, yellows) indicate increased brain activity, whereas cooler colors (blues and greens) indicate decreased activity.

RETRIEVAL PRACTICE: SCHIZOPHRENIA

Self-Test

Completing this self-test and comparing your answers with those in Appendix B provides immediate feedback and helpful practice for exams. Additional interactive, self-tests are available at www.wiley.com/college/huffman.

1. Major disturbances in perception, language, thought, emotion, and behavior may be diagnosed as _____.

a. schizophrenia
b. multiple dissociative disorder
c. borderline psychosis
d. neurotic psychosis

2. _____ refers to "split mind," whereas refers to "split personality."

a. Psychosis; neurosis
b. Insanity; multiple personalities
c. Schizophrenia; dissociative identity disorder (DID)
d. Paranoia; borderline

3. In extreme cases, schizophrenia is also a form of _____, a term describing general lack of contact with reality.

a. multiple personality disorder
b. psychosis
c. borderline polar psychosis
d. all the above

4. Perceptions for which there are no appropriate external stimuli are called _____, and the most common type among people suffering from schizophrenia is _____.

a. hallucinations; auditory
b. hallucinations; visual
c. delusions; auditory
d. delusions; visual

Think Critically

1. Most of the disorders discussed in this chapter have some evidence for a genetic predisposition. What would you tell a friend who has a family member with one of these disorders and fears that he or she might develop the same disorder?
2. What do you think are the most important biological and psychosocial factors that contribute to schizophrenia?

realworldpsychology

Why might children who experience trauma be at increased risk of developing schizophrenia later in life?

HINT: LOOK IN THE MARGIN FOR Q4

OTHER DISORDERS

RETRIEVAL PRACTICE While reading the upcoming sections, respond to each Learning Objective in your own words. Then compare your responses with those found at www.wiley.com/college/huffman.

1. **SUMMARIZE** the major features of obsessive-compulsive disorder.
2. **DESCRIBE** dissociative disorders.
3. **IDENTIFY** the major characteristics of personality disorders.

LEARNING OBJECTIVES

Having discussed anxiety disorders, mood disorders, and schizophrenia, we now explore three additional disorders: obsessive-compulsive, dissociative, and personality disorders.

Obsessive-Compulsive Disorder (OCD)

OCD involves persistent, unwanted, fearful thoughts (obsessions) and/or irresistible urges to perform an act or repeated rituals (compulsions) to help relieve the anxiety created by the obsession. In adults, women are affected at a slightly higher rate than men, whereas men are more commonly affected in childhood (American Psychiatric Association, 2013).

Common examples of obsessions are fear of germs, fear of being hurt or of hurting others, and troubling religious or sexual thoughts. Examples of compulsions are repeatedly checking, counting, cleaning, washing all or specific body

Image Source/Getty Images

FIGURE 12.14 DISSOCIATION AS AN ESCAPE

The major force behind all dissociative disorders is the need to escape from anxiety. Imagine witnessing a loved one's death in a horrible car accident. Can you see how your mind might cope by blocking out all memory of the event?

Dissociative Disorders

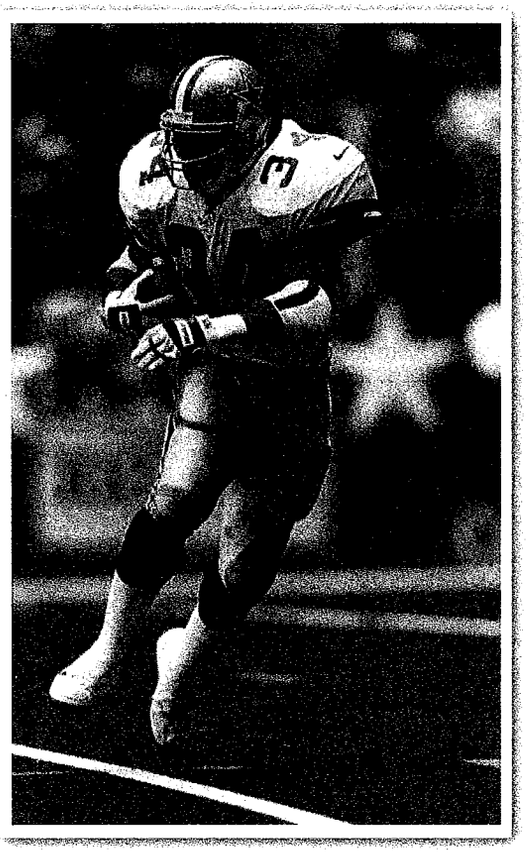
The most dramatic psychological disorders are **dissociative disorders**, psychological dysfunctions characterized by a major loss of memory without a clear physical cause. There are several types, but all are characterized by a splitting apart (a *dis-association*) of significant aspects of experience from memory or consciousness **(Figure 12.14)**. Unlike most other psychological disorders, dissociative disorders appear to be primarily caused by environmental variables, with little or no genetic influence (Hulette et al., 2011; Sinason, 2011; Waller & Ross, 1997).

Dissociative disorder A psychological disorder marked by a disturbance in the integration of consciousness, identity, memory, and other features.

The most severe dissociative disorder is **dissociative identity disorder (DID)**—previously known as multiple personality disorder (MPD)—in which at least two separate and distinct personalities exist within a person at the same time **(Figure 12.15)**. Each personality has unique memories, behaviors, and social relationships. Transition from one personality to another occurs suddenly and is often triggered by psychological stress. Usually, the original personality has no knowledge or awareness of the alternate personalities, but all the personalities may be aware of lost periods of time. The disorder is diagnosed about equally among men and women (American Psychiatric Association, 2013).

Dissociative identity disorder (DID) A mental disorder characterized by the presence of two or more distinct personality systems in the same individual at different times; previously known as multiple personality disorder (MPD).

DID is a controversial diagnosis. Some experts suggest that many cases are faked or result from false memories and an unconscious need to please the therapist (Boysen & VanBergen, 2013; Kihlstrom, 2005; Ost et al., 2013; Stafford & Lynn, 2002). On the other side of the debate are psychologists who accept the validity of DID and provide treatment guidelines (Brown, 2011; Chu, 2011; Dalenberg et al., 2007; Lipsanen et al., 2004; Moline, 2013).



Stephen Dunn /Allsport / GettyImages.

FIGURE 12.15 A PERSONAL ACCOUNT OF DID

Herschel Walker, professional football player, pro bowler, Olympic bobsledder, and business and family man, now suggests that none of the people who played these roles were really he. They were his "alters," or alternate personalities. He has been diagnosed with the controversial diagnosis of *dissociative identity disorder (DID)*. Although some have suggested that the disorder helped him succeed as a professional athlete, it played havoc with his personal life. He's now in treatment and has written a book, *Breaking Free*, hoping to change the public's image of DID.

interaction between both heredity and environment (Douglas et al., 2011; Hudziak, 2008; Philibert et al., 2011; Trull et al., 2013).

Borderline Personality Disorder

Borderline personality disorder (BPD) is among the most commonly diagnosed and most functionally disabling of all mental disorders (Ansell & Grilo, 2007; Chanen & McCutcheon, 2013; Gunderson, 2011; Rizvi & Salters-Pedneault, 2013).

Borderline personality disorder (BPD) A mental disorder characterized by severe instability in emotion and self-concept, along with impulsive and self-destructive behaviors.

The core features of this disorder are impulsivity and instability in mood, relationships, and self-image. Originally, the term implied that the person was on the borderline between neurosis and schizophrenia (Schroeder et al., 2013). The modern conceptualization no longer has this connotation, but BPD remains one of the most complex and debilitating of all the personality disorders.

People with BPD experience extreme difficulties in relationships. Subject to chronic feelings of depression, emptiness, and intense fear of abandonment, they also engage in destructive, impulsive behaviors, such as sexual promiscuity, drinking, gambling, and eating sprees. In addition, they may attempt suicide and sometimes engage in self-mutilating behavior (Chapman et al., 2008; Lynam et al., 2011; Muehlenkamp et al., 2011; Turnbull et al., 2013).

Those with BPD also tend to see themselves and everyone else in absolute terms—as either perfect or worthless (Mak & Lam, 2013; Rizvi & Salters-Pedneault, 2013; Scott et al., 2011). Constantly seeking reassurance from others, they may quickly erupt in anger at the slightest sign of disapproval. The disorder is also typically marked by a long history of broken friendships, divorces, and lost jobs.

In short, people with this disorder appear to have a deep well of intense loneliness and a chronic fear of abandonment and they often seek therapy. Unfortunately, given their troublesome personality traits, friends, lovers, and even family members and therapists often do "abandon" them—thus creating a tragic self-fulfilling prophecy. The good news is that BPD can be reliably diagnosed and it does respond to professional intervention—particularly in young people (Chanen & McCutcheon, 2013; Fleischhaker et al., 2011; Leichsenring et al., 2011; Rizvi & Salters-Pedneault, 2013).

What causes BPD? Some research points to environmental factors, such as a childhood history of neglect, emotional deprivation, and physical, sexual, or emotional abuse (Chanen & McCutcheon, 2013; Distel et al., 2011). From a biological perspective, BPD also tends to run in families, and some data suggest that it is a result of impaired functioning of the brain's frontal lobes and limbic system, areas that control impulsive behaviors (Leichsenring et al., 2011; Mak & Lam, 2013; Schulze et al., 2011). For example, research using neuroimaging reveals that people with BPD show more activity in parts of the brain associated with the experience of negative emotions, coupled with less activity in parts of the brain that help suppress negative emotion (Ruocco et al., 2013). As in many cases, most researchers agree that BPD results from an interaction between the environment and biology (Carpenter et al., 2013; Ripoll et al., 2013).

RETRIEVAL PRACTICE: OTHER DISORDERS

Self-Test

Completing this self-test and comparing your answers with those in Appendix B provides immediate feedback and helpful practice for exams. Additional interactive, self-tests are available at www.wiley.com/college/huffman.

1. Repetitive, ritualistic behaviors, such as hand washing, counting, or putting things in order, are called a(n) _____.

a. obsessions
b. compulsions
c. ruminations
d. phobias

2. A disorder characterized by disturbances in consciousness, identity, memory, and other features is known as a(n) _____.

a. dissociative disorder
b. disoriented disorder
c. displacement disorder
d. identity disorder

Certain risk factors for depression (such as genetic predisposition, marital problems, pain, and medical illness) are common to both men and women. However, poverty is a well-known contributor to many psychological disorders, and women are far more likely than men to fall into the lowest socioeconomic groups. Women also experience more sexual trauma, partner abuse, and chronic stress in their daily lives, and these are all well-known contributing factors in depression (Doornbos et al., 2013; Harkness et al., 2010; Mapayi et al., 2013; Mota et al., 2012; Neri et al., 2012; Oram et al., 2013).

Recent research also suggests that some gender differences in depression may relate to the way women and men tend to internalize or externalize their emotions. Using structured interview techniques, researchers found that women ruminate more frequently than men, which means they are more likely to focus repetitively on their *internal* negative emotions and problems rather than engage in more external problem-solving strategies. In contrast, men tend to be more disinhibited and more likely to *externalize* their emotions and problems (Dawson et al., 2010; Schirmer, 2013; Tarter et al., 2003; Tompkins et al., 2011; Xu et al., 2012).

On the other hand, gender differences may result from misapplied gender role stereotypes. For example, the most common symptoms of depression, such as crying, low energy, dejected facial expressions, and withdrawal from social activities, are more socially acceptable for women than for men. And the fact that gender differences in depression are more pronounced in cultures with traditional gender roles (e.g., Seedat et al., 2009) suggests that male depression may be underdiagnosed because men are raised to be better at hiding and redirecting their emotions (Fields & Cochran, 2011). In U.S. society, men are typically socialized to suppress their emotions and to show their distress by acting out (showing aggression), acting impulsively (driving recklessly and committing petty crimes), or engaging in substance abuse.

To examine different expectations about depression as a function of gender, researchers in one study asked participants to read a story about a fictitious person (Kate in one version, Jack in the other). The story was exactly the same in both conditions and included the following information: "For the past two weeks, Kate/Jack has been feeling really down. S/he wakes up in the morning with a flat, heavy feeling that stick with her/him all day. S/he isn't enjoying things the way s/he normally would. S/he finds it hard to concentrate on anything." Although all participants read the same story, those who read about Kate rated her symptoms as more distressing, deserving of sympathy, and difficult to treat (Swami et al., 2012). Q6

psychology and you **Strategies for Managing Depression** Do you, or does someone you know, suffer from depression? Fortunately, many strategies can help both men and women cope with depression. For example, in order to prevent or reduce depression, women may benefit from learning better coping and cognitive skills to reduce the likelihood of rumination and just wallowing in sad feelings. On the other hand, if it's true that men more often express their depression through impulsive, acting-out behaviors, then rewarding deliberate, planned behaviors over unintentional, spur-of-the moment ones may be helpful for treating some forms of male depression (Eaton et al., 2012).

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Understanding the importance of genetic predispositions, external environmental factors (like poverty), and cognitive factors (like internalizing versus externalizing emotions and problems) may help mental health professionals better understand individual and gender-related differences in depression.

TABLE 12.3 CULTURE-GENERAL SYMPTOMS OF MENTAL HEALTH DIFFICULTIES

Nervous	Trouble sleeping	Low spirits
Weak all over	Personal worries	Restless
Feel apart, alone	Can't get along	Hot all over
Worry all the time	Can't do anything worthwhile	Nothing turns out right

Source: Brislin, 2000.

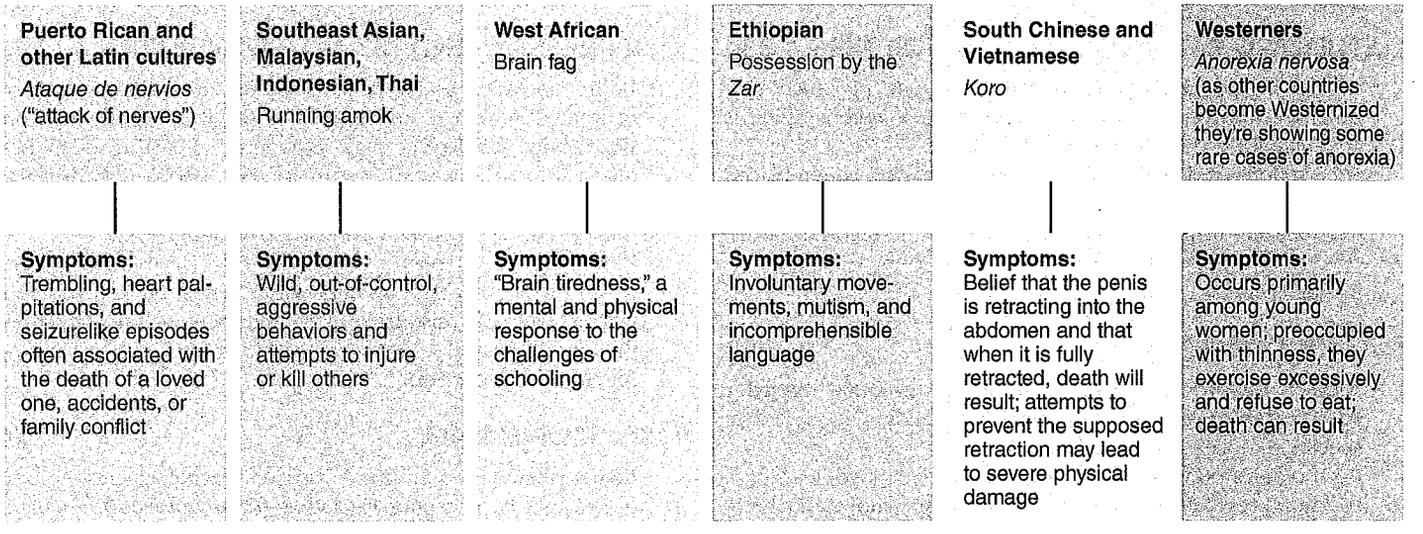
This division between culture-general and culture-bound symptoms also helps us better understand depression. Certain symptoms of depression (such as intense sadness, poor concentration, and low energy) seem to exist across all cultures (Walsh & Cross, 2013; World Health Organization, 2011). But there is also evidence of some culture-bound symptoms. For example, feelings of guilt are found more often in North America and Europe than in other parts of the world. And in China, *somatization* (the conversion of depression into bodily complaints) occurs more frequently than it does in other parts of the world (Helms & Cook, 1999; Lawrence et al., 2011; Lim et al., 2011).

Just as there are culture-bound and culture-general symptoms, researchers have found that mental disorders are themselves sometimes culturally bound and generally only appear in one population group **(Figure 12.17)**. The earlier example of windigo psychosis, a disorder limited to a small group of Canadian Indians, illustrates just such a case.

As you can see, culture has a strong effect on mental disorders. Studying the similarities and differences across cultures can lead to better diagnosis and understanding. It also helps mental health professionals who work with culturally diverse populations understand both culturally general and culturally bound symptoms.

FIGURE 12.17 CULTURE-BOUND DISORDERS

Some disorders are fading as remote areas become more Westernized, whereas other disorders (such as anorexia nervosa) are spreading as other countries adopt Western values.



instead on **positive schizophrenia symptoms** versus **negative schizophrenia symptoms**.

- Most biological theories of schizophrenia focus on genetics, neurotransmitters, and brain abnormalities. Psychologists believe that there are also at least two possible psychosocial contributors: stress and communication disorders in families.

5 OTHER DISORDERS 355

- **Obsessive-compulsive disorder (OCD)** involves persistent, unwanted, fearful thoughts (obsessions) and/or irresistible urges to perform an act or repeated rituals (compulsions), which help relieve the anxiety created by the obsession. Given that numerous biological and psychological factors contribute to OCD, its most often treated with a combination of drugs and cognitive-behavior therapy (CBT).
- **Dissociative disorders** are characterized by a major loss of memory without a clear physical cause, and a subtype of these disorders, **dissociative identity disorder (DID)**, involves the presence of two or more distinct personality systems in the same individual at different times. Environmental variables appear to be the primary cause of dissociative disorders. Dissociation can be a form of escape from a past trauma.
- **Personality disorders** occur when inflexible, maladaptive personality traits cause significant impairment of social and occupational functioning. **Antisocial personality disorder** is a pattern of disregard for, and violation of, the rights of others. The most common personality disorder is **borderline personality disorder (BPD)**. Its core features are impulsivity and instability in mood, relationships, and self-image. Although some therapists have success with drug therapy and behavior therapy, the prognosis is not favorable.

6 GENDER AND CULTURAL EFFECTS 360

- Men and women differ in their rates and experiences of abnormal behavior. For instance, in the case of depression, modern research suggests that the gender-ratio differences may reflect an underlying predisposition toward internalizing or externalizing emotions and problems.
- Peoples of different cultures experience mental disorders in a variety of ways. For example, the reported incidence of schizophrenia varies in different cultures around the world, as do the disorder's symptoms, triggers, and prognosis.
- Some symptoms of psychological disorders, as well as some disorders themselves, are *culture general*, whereas others are *culture bound*.

applyingrealworldpsychology

We began this chapter with five intriguing Real World Psychology questions, and you were asked to revisit these questions at the end of each section. Questions like these have an important and lasting impact on all of our lives. See if you can answer these additional critical thinking questions related to real world examples.

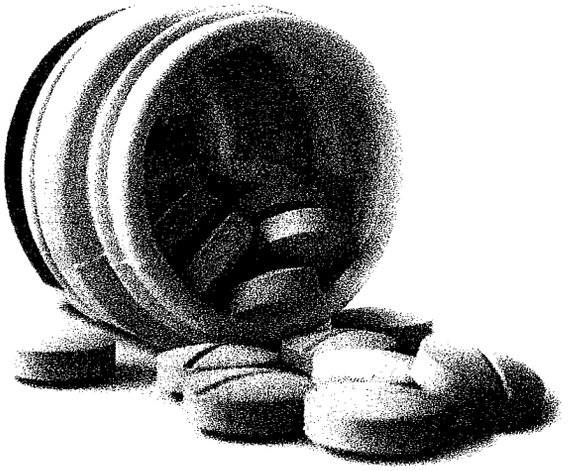
Jodi Cobb/NG Image Collection

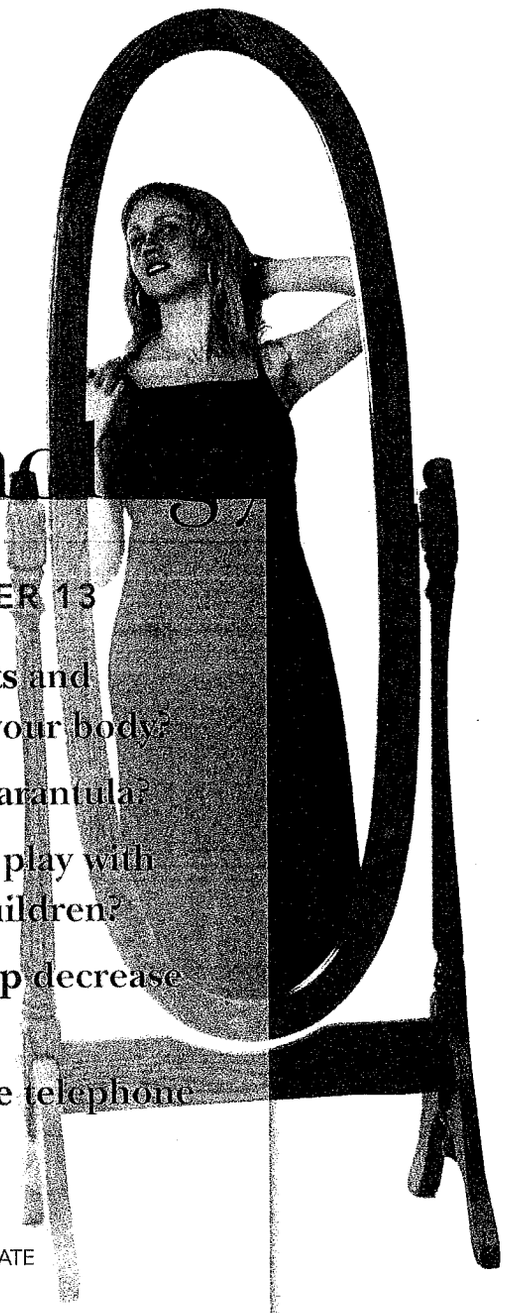
1. Is this man's behavior abnormal? Which criteria for psychological disorders do his piercings and tattoos meet? Which do they not?
2. Can you think of any behavior *you* exhibit that might be considered abnormal if your own cultural norms were not taken into account?
3. We've all experienced anxiety. Which of the explanations described in this section do you feel best describes your personal experiences with it? Why?
4. Recall an experience you've had with depression. How was it similar to or different from what was discussed in the section on major depressive disorders?
5. In the section on schizophrenia, we pointed out that if one identical twin develops schizophrenia, there is a 48% chance that the other twin will do so as well. How does this high correlation support the diathesis-stress model?
6. Think about someone you know—a friend, a family member, or yourself—who suffers from one of the disorders described in this chapter. How does the information we've provided differ from or match what you've discovered from your own or others' experiences?

Key Terms

RETRIEVAL PRACTICE Write a definition for each term before turning back to the referenced page to check your answer.

- abnormal behavior 334
- antisocial personality disorder 358
- anxiety disorder 340
- bipolar disorder 346
- borderline personality disorder (BPD) 359
- comorbidity 337
- delusion 352
- depressive disorders 345
- *Diagnostic and Statistical Manual of Mental Disorders (DSM)* 337
- diathesis-stress model 354
- dissociative disorder 357
- dissociative identity disorder (DID) 357
- generalized anxiety disorder (GAD) 341
- hallucination 351
- insanity 337
- learned helplessness 349
- medical model 336
- neurosis 337
- obsessive-compulsive disorder (OCD) 356
- panic disorder 341
- personality disorder 358
- phobia 342
- psychiatry 336
- psychosis 337
- schizophrenia 350





realworldpsych

THINGS YOU'LL LEARN IN CHAPTER 13

Q1 **Can changing your irrational thoughts and self-talk make you feel better about your body?**

Q2 **How might therapy help you hold a tarantula?**

Q3 **Does simply watching other children play with dogs reduce dog phobias in young children?**

Q4 **How do psychotherapeutic drugs help decrease thoughts of suicide?**

Q5 **Can therapy that is delivered over the telephone lead to lower levels of depression?**

THROUGHOUT THE CHAPTER, MARGIN ICONS FOR Q1–Q5 INDICATE WHERE THE TEXT ADDRESSES THESE QUESTIONS.

touch screen mobile phone: © mikered/iStockphoto; tarantula: © Okea/iStockphoto; two boys with dog: © tobkatrina/Shutterstock; bottle of pills: © karimhesham/iStockphoto; girl looking in mirror: © Gary Alvis/iStockphoto

TALK THERAPIES

RETRIEVAL PRACTICE While reading the upcoming sections, respond to each Learning Objective in your own words. Then compare your responses with those found at www.wiley.com/college/huffman.

LEARNING OBJECTIVES

1. **DESCRIBE** the core treatment techniques in psychoanalysis and modern psychodynamic therapies.
2. **SUMMARIZE** the key characteristics of humanistic therapies.
3. **EXPLAIN** the principles underlying cognitive therapies.

We begin our discussion of professional **psychotherapy** with traditional psychoanalysis and its modern counterpart, psychodynamic therapies. Then we explore humanistic and cognitive therapies. Although these therapies differ significantly, they're often grouped together as "talk therapies" because they emphasize communication between the therapist and client, as opposed to the behavioral and biomedical therapies we discuss later.

Psychotherapy Any of a group of therapies used to treat psychological disorders and to improve psychological functioning and adjustment to life.

Psychoanalysis/Psychodynamic Therapies

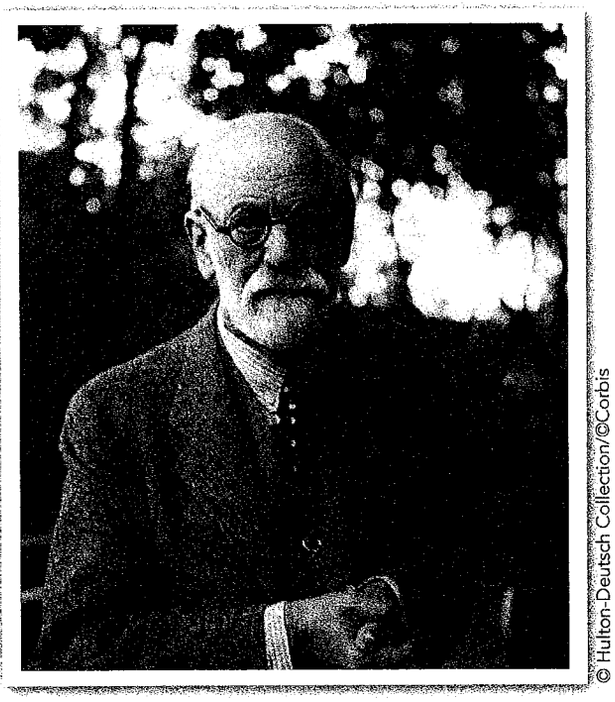
In **psychoanalysis**, a person's *psyche* (or mind) is *analyzed*. Traditional psychoanalysis is based on Sigmund Freud's central belief that abnormal behavior is caused by unconscious conflicts among the three parts of the psyche—the id, the ego, and the superego (Chapter 11).

During psychoanalysis, these conflicts are brought to consciousness. The patient comes to understand the reasons for his or her dysfunction and realizes that the childhood conditions under which the conflicts developed no longer exist. Once this realization or insight occurs, the conflicts can be resolved, and the patient can develop more adaptive behavior patterns (Altman, 2013; Cordón, 2012; Johnson, 2011).

Psychoanalysis A type of psychodynamic therapy developed by Freud; an intensive and prolonged technique for bringing unconscious conflicts into conscious awareness.

Free association In psychoanalysis, reporting whatever comes to mind without monitoring its contents.

Unfortunately, according to Freud, the ego has strong *defense mechanisms* that block unconscious thoughts from coming to light. Thus, to gain insight into the unconscious, the ego must be "tricked" into relaxing its guard. To meet that goal, psychoanalysts employ five major methods: *free association*, *dream analysis*, *analyzing resistance*, *analyzing transference*, and *interpretation*.



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Sigmund Freud (1856–1939)
Freud believed that during psychoanalysis, the therapist's (or psychoanalyst's) major goal was to bring unconscious conflicts into consciousness.

Free Association

According to Freud, when you let your mind wander and remove conscious censorship over thoughts—a process called **free association**—interesting and even bizarre connections seem to spring into awareness. Freud believed that the first thing to come to a patient's mind is often an important clue to what the person's unconscious wants to conceal. Having the patient recline on a couch, with only the ceiling to look at, is believed to encourage free association **(Figure 13.2)**.

Dream Analysis

Recall from Chapter 5 that, according to Freud, our psychological defenses are lowered during sleep. Therefore, our forbidden desires and unconscious conflicts are supposedly more freely expressed during dreams. Even while dreaming, however, we recognize these feelings and conflicts as unacceptable and must disguise them as

Evaluating Psychoanalysis

As you can see, psychoanalysis is largely rooted in the assumption that repressed memories and unconscious conflicts actually exist. But, as we noted in Chapters 7 and 11, this assumption is the subject of heated, ongoing debate. Critics also point to two other problems with psychoanalysis (Messer & Gurman, 2011; Miltenberger, 2011; Siegel, 2010):

- **Limited applicability** Psychoanalysis is time-consuming (often lasting several years with four to five sessions a week) and expensive. In addition, critics suggest that it applies only to a select group of highly motivated, articulate patients with less severe disorders and not to more complex disorders, such as schizophrenia.
- **Lack of scientific credibility** According to critics, it is difficult, if not impossible, to scientifically document the major tenets of psychoanalysis. How do we prove or disprove the importance or meaning of unconscious conflicts or symbolic dream images?

Despite these criticisms, research shows that traditional psychoanalysis can be effective for those who have the time and money (Altman, 2013; Barratt, 2013; Lambert, 2013; Spurling, 2011).

Stockbyte/SUPERSTOCK

FIGURE 13.3 INTERPERSONAL THERAPY (IPT)

IPT, a variation of psychodynamic therapy, focuses on current relationships, with the goal of relieving immediate symptoms and teaching better ways to solve interpersonal problems. Research shows that it's effective for a variety of disorders, including depression, marital conflict, eating disorders, and drug addiction (Aldenhoff, 2011; Cuijpers et al., 2011; Hardy, 2011; Stricker et al., 2013).

Psychodynamic Therapy

A modern derivative of Freudian psychoanalysis, **psychodynamic therapy**, includes both Freud's theories and those of his major followers—Jung, Adler, and Erikson. In contrast to psychoanalysis, psychodynamic therapy is shorter and less intensive (one or twice a week versus several times a week and only a few weeks or months versus years). In addition, the patient is treated face-to-face rather than reclining on a couch, and the therapist takes a more directive approach rather than waiting for unconscious memories and desires to slowly be uncovered.

Also, contemporary psychodynamic therapists focus less on unconscious, early-childhood roots of problems and more on conscious processes and current problems (Frew & Spiegler, 2013; Hunsley & Lee, 2010; Zuckerman, 2011). Such refinements have helped make treatments shorter, more available, and more effective for an increasing number of people. See **Figure 13.3** for one of the most popular modern forms of psychodynamic therapy.

Psychodynamic therapy A type of therapy that focuses on conscious processes and current problems; a briefer, more directive, and more modern form of psychoanalysis.

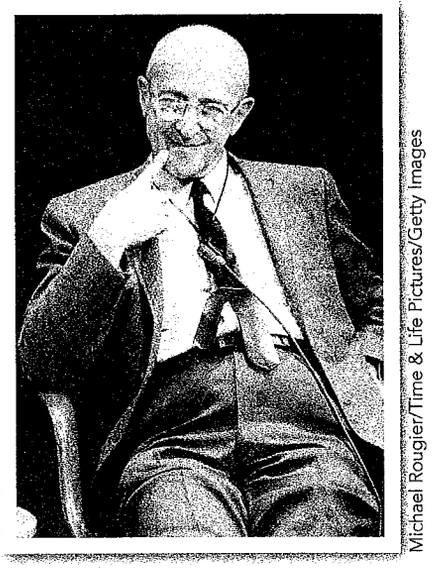
Humanistic therapy A type of therapy that emphasizes maximizing a client's inherent capacity for self-actualization by providing a non-judgmental, accepting atmosphere.

Humanistic Therapies

In contrast to the rather aloof doctor-to-patient approach of the psychoanalytic and psychodynamic therapies, the humanistic approach emphasizes the *human* characteristics of a person's potential, free will, and self-awareness.

Humanistic therapy assumes that people with problems are suffering from a disruption of their normal growth potential and, hence, their self-concept. When obstacles are removed, the individual is free to become the self-accepting, genuine person everyone is capable of being.

One of the best-known humanistic therapists is Carl Rogers (Rogers, 1961, 1980), who developed an approach that encouraged people to actualize their potential and to relate to others in genuine ways. His approach is referred to as



Michael Rougier/Time & Life Pictures/Getty Images

Carl Rogers (1902–1987)

psychology and you **Using Active Listening Personally and Professionally** If you want to try active listening in your personal life, note that to *reflect* is to hold a mirror in front of the person, enabling that person to see him- or herself. To *paraphrase* is to summarize in different words what the other person is saying. To *clarify* is to check that both the speaker and listener are on the same wavelength.

When a professional uses active listening, he or she might notice a client's furrowed brow and downcast eyes while he is discussing his military experiences and then might respond, "It sounds like you're angry with your situation and feeling pretty miserable right now." Can you see how this statement reflects the client's anger, paraphrases his complaint, and gives feedback to clarify the communication? This type of attentive, active listening is a relatively simple and well-documented technique that you can use to improve your communication with virtually anyone—professors, employers, friends, family, and especially your love partner.

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Evaluating Humanistic Theories

Supporters say that there is empirical evidence for the efficacy of client-centered therapy (Benjamin, 2011; Cain, 2013; Hazler, 2011; Messer & Gurman, 2011). However, critics argue that outcomes such as self-actualization and self-awareness are difficult to test scientifically, and research on specific humanistic techniques has had mixed results (Decker et al., 2013; Hodges & Biswas-Diener, 2007; Norcross & Wampold, 2011; Stiles, 2013).

Cognitive Therapies

Cognitive therapy assumes that faulty thought processes—beliefs that are irrational or overly demanding or that fail to match reality—create problem behaviors and emotions (Friedberg & Belsford, 2011; Palmer & Williams, 2013; Pomerantz, 2013).

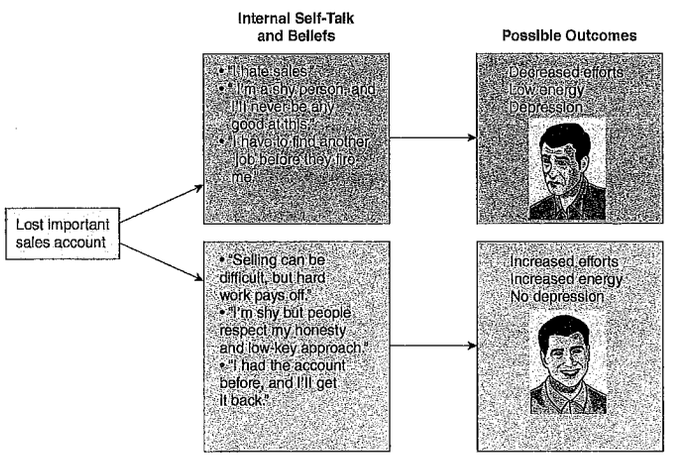
Cognitive therapy A type of therapy that treats problem behaviors and mental processes by focusing on faulty thought processes and beliefs.

Like psychoanalysts, cognitive therapists believe that exploring unexamined beliefs can produce insight into the reasons for disturbed thoughts, feelings, and behaviors. However, instead of believing that a change occurs because of insight, cognitive therapists suggest that negative *self-talk*, the unrealistic things a person tells himself or herself, is most important. For example, research with women suffering from eating disorders found that changing a patient's irrational thoughts and self-talk, such as "If I eat that cake, I will become fat instantly" or "I'll never have a dating relationship if I don't lose 20 pounds," resulted in their having fewer negative thoughts about their bodies (Bhatnagar et al., 2013).

Through a process called **cognitive restructuring**, clients are taught to identify and then challenge this type of negative self-talk, as well as change the way they interpret events and modify their maladaptive behaviors **(Figure 13.6)**.

Cognitive restructuring A process in cognitive therapy that is designed to change destructive thoughts or inappropriate interpretations.

FIGURE 13.6 USING COGNITIVE RESTRUCTURING TO IMPROVE SALES | realworldpsychology



A Note how the negative interpretation and destructive self-talk leads to destructive and self-defeating outcomes.

B Cognitive therapy teaches clients to challenge and change their negative beliefs and negative self-talk into positive ones, which, in turn, leads to more positive outcomes. Can you think of other situations in which such reinterpretation could be helpful?

Voices from the Classroom

REBT and Your Grades Students put lots of pressure on themselves by thinking "I *must* do well on this test" or "I *have to* get a good test grade." We discuss this in terms of Ellis's REBT. First, this kind of pressure may hinder their performance. Second, I ask students, "Do you really *have to* get a good grade? What is the worst thing that would happen if you didn't?" They might fail the class, which might lower their GPA and/or cause them to retake the class, but plenty of people retake classes. Plus, a low grade probably won't cause them to fail the class. They are more likely to just get a lower class grade than desired. I encourage students to think more positively ("I hope to do well") or to come up with a success plan ("I will study nightly for at least one hour to get a good test score").

Professor David Baskind
Delta College
University Center, Michigan

Beck's Cognitive-Behavior Therapy (CBT)

Another well-known cognitive therapist, Aaron Beck, also believes psychological problems result from illogical thinking and destructive self-talk (Beck, 1976, 2000; Beck & Grant, 2008). But Beck seeks to directly confront and change the behaviors associated with destructive cognitions. Beck's **cognitive-behavior therapy (CBT)** is designed to reduce *both* self-destructive thoughts *and* self-destructive behaviors.

Cognitive-behavior therapy (CBT) A type of therapy that combines cognitive therapy (changing faulty thinking) with behavior therapy (changing maladaptive behaviors).

Using cognitive-behavior therapy, clients are first taught to recognize and keep track of their thoughts. Next, the therapist trains the client to develop ways to test these automatic thoughts against reality. This approach helps depressed people discover that negative attitudes are largely a product of faulty thought processes.

At this point, Beck introduces the second phase of therapy—persuading the client to actively pursue pleasurable activities. Depressed individuals often lose motivation, even for experiences they used to find enjoyable. Simultaneously taking an active rather than a passive role and reconnecting with enjoyable experiences can help in recovering from depression (see *A Cognitive Approach to Lifting Depression*).

A COGNITIVE APPROACH TO LIFTING DEPRESSION

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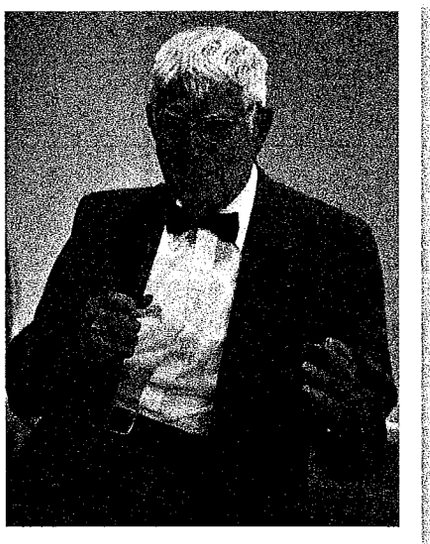
One of the most successful applications of Beck's CBT is in the treatment of depression (Beck, 1976, 2000; Beck et al., 2012; Hollon, 2011; Roelofs et al., 2013). Beck identified several thinking patterns believed to be common among depression-prone people. Recognizing these patterns in our own thought processes may help prevent or improve the occasional bad moods we all experience. To fully benefit from this approach, use what therapists call the "three C's"—*catch the faulty thought*, *challenge it*, and then *change it*. Here we provide an example of the three C's for the first thought pattern, and then you should try to do the same for the other three:

- **Selective perception** Focusing selectively on negative events while ignoring positive events. (*Catch the thought* ="Why am I the only person alone at this party?"; *Challenge it* = "I notice four other single people at this party"; *Change it* = "Being single has several advantages. I'll bet some of the couples are actually envying my freedom.")
- **Overgeneralization** Overgeneralizing and drawing negative conclusions about our own self-worth. ("I'm worthless because I failed that exam.")
- **Magnification** Exaggerating the importance of undesirable events or personal shortcomings and seeing them as catastrophic and unchangeable. ("She left me, and I'll never find anyone like her again!")
- **All-or-nothing thinking** Seeing things as black-or-white categories—where everything is either totally good or bad, right or wrong, a success or a failure. ("If I don't get straight A's, I'll never get a good job.")



Clem Murray/MCT/NewsCom

Aaron Beck

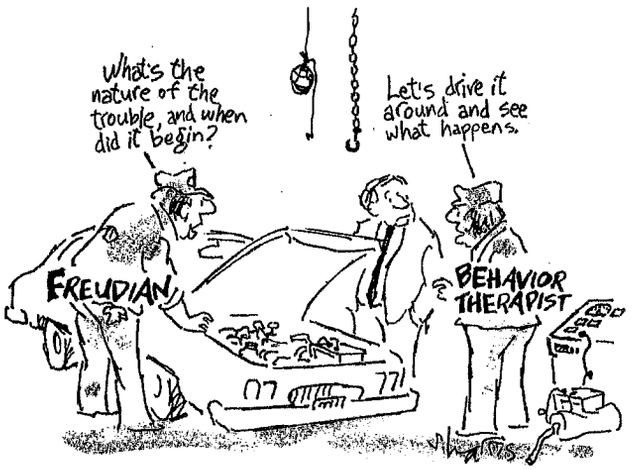
BEHAVIOR THERAPIES

RETRIEVAL PRACTICE While reading the upcoming sections, respond to each Learning Objective in your own words. Then compare your responses with those found at www.wiley.com/college/huffman.

LEARNING OBJECTIVES

1. **DESCRIBE** how classical conditioning is used in therapy.
2. **EXPLORE** how operant conditioning can be used in therapy.
3. **SUMMARIZE** how observational learning is used in therapy.
4. **DESCRIBE** two major criticisms of behavior therapies.

Sometimes having insight into a problem does not automatically solve it. In **behavior therapy**, the focus is on the problem behavior itself rather than on any underlying causes. Although the person's feelings and interpretations are not disregarded, they are also not emphasized. The therapist diagnoses the problem by listing maladaptive behaviors that occur and adaptive behaviors that are absent. The therapist then attempts to shift the balance of the two, drawing on the learning principles of classical conditioning, operant conditioning, and observational learning (Chapter 6).



SidneyHarris/Science CartoonsPlus.com

Classical Conditioning

Behavior therapists use the principles of classical conditioning to decrease maladaptive behaviors by creating new associations to replace the faulty ones. We will explore two techniques based on these principles: *systematic desensitization* and *aversion therapy*.

Recall from Chapter 6 that classical conditioning occurs when a neutral stimulus (NS) becomes associated with an unconditioned stimulus (US) to elicit a conditioned response (CR). Sometimes a classically conditioned fear response becomes so extreme that we call it a "phobia." To treat phobias, behavior therapists often use **systematic desensitization**, which begins with relaxation training, followed by imagining or directly experiencing various versions of a feared object or situation while remaining deeply relaxed (Wolpe & Plaud, 1997). See **Figure 13.7** for a description of systematic desensitization useful for overcoming a driving phobia.

Behavior therapy A group of techniques based on learning principles to change maladaptive behaviors.

Systematic desensitization A behavioral therapy technique in which a client learns to prevent the arousal of anxiety by gradually confronting the feared stimulus while relaxed.

FIGURE 13.7 SYSTEMATIC DESENSITIZATION

In systematic desensitization, the therapist and client together construct a *fear hierarchy*, a ranked listing of 10 or so related anxiety-arousing images. While in a state of relaxation, the client mentally visualizes or physically experiences mildly anxiety-producing items at the lowest level of the hierarchy and then works his or her way up to the most anxiety-producing items at the top. Each progressive step on the fear hierarchy is repeatedly paired with relaxation, until the fear response or phobia is extinguished.

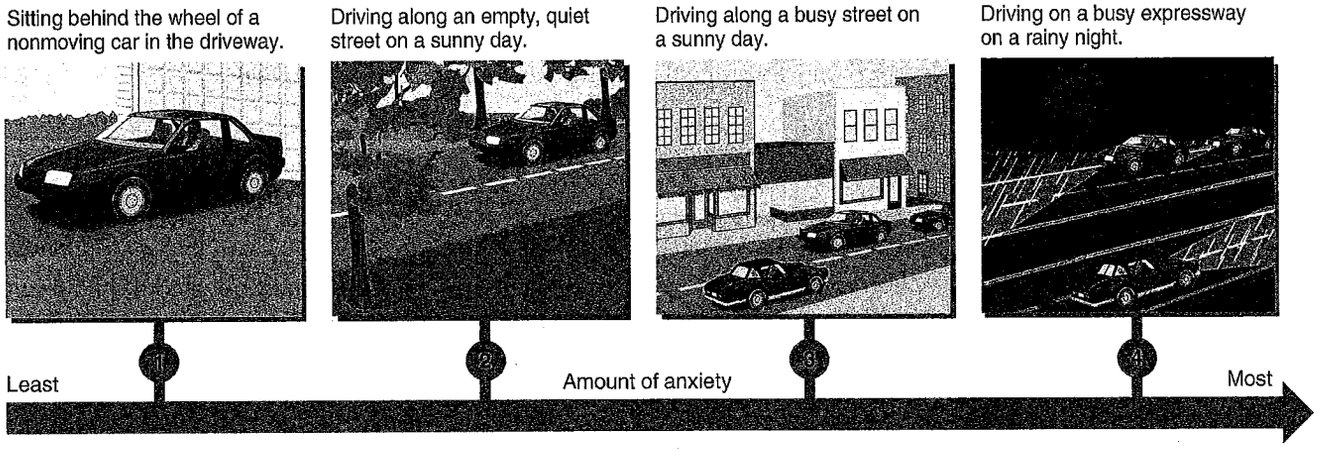


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FIGURE 13.10 OBSERVATIONAL LEARNING

During modeling therapy, a client might learn how to interview for a job by first watching the therapist role-play the part of the interviewee. The client then imitates the therapist's behavior and plays the same role. Over the course of several sessions, the client becomes gradually desensitized to the anxiety of interviews.

Adaptive behaviors can also be taught or increased with techniques that provide immediate reinforcement in the form of tokens (Craighead et al., 2013; Reed & Martens, 2011; Spiegler, 2013). For example, patients in an inpatient treatment facility might at first be given tokens (to be exchanged for primary rewards, such as food, treats, TV time, a private room, or outings) for merely attending group therapy sessions. Later they will be rewarded only for actually participating in the sessions. Eventually, the tokens can be discontinued when the patient receives the reinforcement of being helped by participation in the therapy sessions.

Observational Learning

We all learn many things by observing others. Therapists use this principle in **modeling therapy**, in which clients are asked to observe and imitate appropriate models as they perform desired behaviors. For example, researchers successfully treated 4- and 5-year-old children with severe dog phobias by asking them first to watch other children play with dogs and then to gradually approach and get physically closer to the dogs themselves (May et al., 2012). When this type of therapy combines live modeling with direct and gradual practice, it is called *participant modeling*. This type of modeling is also effective in social skills training and assertiveness training **(Figure 13.10)**.

Modeling therapy A type of therapy characterized by watching and imitating models that demonstrate desirable behaviors.

Evaluating Behavior Therapies

Criticisms of behavior therapy fall into two major categories:

- **Generalizability** Critics argue that in the real world, clients are not consistently reinforced, and their newly acquired behaviors may disappear. To deal with this possibility, behavior therapists work to encourage clients to better recognize existing external real world rewards and to generate their own internal reinforcements, which they can then apply at their own discretion.
- **Ethics** Critics contend that it is unethical for one person to control another's behavior. Behaviorists, however, argue that rewards and punishments already control our behaviors. Behavior therapy actually increases our freedom by making these controls overt and by teaching people how to change their own behavior.

Despite these criticisms, behavior therapy is generally recognized as one of the most effective treatments for numerous problems, including phobias, obsessive-compulsive disorder, eating disorders, sexual dysfunctions, autism, intellectual disabilities, and delinquency (Ahearn & Tiger, 2013; Bergman, 2013; Haynes et al., 2011; Spiegler, 2013). For an immediate practical application of behavior therapy to your college life, see *Do You Have Test Anxiety?*

Think Critically

1. Imagine that you were going to use the principles of cognitive-behavioral therapy to change some aspect of your own thinking and behavior. If you'd like to quit smoking, or be more organized, how would you identify the faulty thinking perpetuating these behaviors and fears?
2. Once you've identified your faulty thinking patterns, what could you do to change your behavior?
3. Under what circumstances might behavior therapy be unethical?

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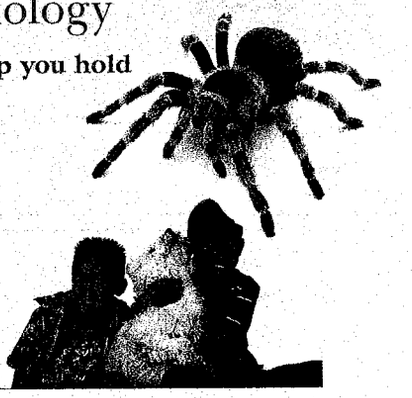
How might therapy help you hold a tarantula?

Does simply watching other children play with dogs reduce dog phobias in young children?



HINT: LOOK IN THE MARGIN FOR Q2 AND Q3

BIOMEDICAL THERAPIES

RETRIEVAL PRACTICE While reading the upcoming sections, respond to each Learning Objective in your own words. Then compare your responses with those found at www.wiley.com/college/huffman.

LEARNING OBJECTIVES

1. **DESCRIBE** biomedical therapies.
2. **IDENTIFY** the major types of drugs used to treat psychological disorders.
3. **EXPLAIN** what happens in electroconvulsive therapy and psychosurgery.
4. **DESCRIBE** the risks and benefits associated with biomedical therapies.

Some problem behaviors seem to be caused, at least in part, by chemical imbalances or disturbed nervous system functioning, and, as such, they can be treated with **biomedical therapies**. Psychiatrists or other medical personnel are generally the only ones who use biomedical therapies. However, in some states, licensed psychologists can prescribe certain medications, and they often work with patients receiving biomedical therapies. In this section, we will discuss three aspects of biomedical therapies: *psychopharmacology*, *electroconvulsive therapy* (*ECT*), and *psychosurgery*.

Biomedical therapy A treatment for psychological disorders that alters brain functioning with biological or physical interventions (for example, drugs, electroconvulsive therapy, psychosurgery).

Psychopharmacology

Since the 1950s, drug companies and **psychopharmacology** have helped correct chemical imbalances that underly some abnormal behaviors. In these instances, using a psychotherapeutic drug is similar to administering insulin to people with diabetes, whose own bodies fail to manufacture enough. In other cases, drugs have been used to relieve or suppress the symptoms of psychological disturbances even when the underlying cause was not thought to be biological. As shown in **Table 13.2**, psychotherapeutic drugs are classified into four major categories: *anti-anxiety*, *antipsychotic*, *mood stabilizer*, and *antidepressant*.

Psychopharmacology The study of the effect of drugs on behavior and mental processes.

How do drug treatments such as antidepressants actually work? Although we don't fully understand all the mechanisms at play, some studies suggest that antidepressants increase *neurogenesis*, the production of new neurons, or *synaptogenesis*, the production of new synapses, and/or stimulate activity in various areas of the brain (Anacker et al., 2011; Castrén & Hen, 2013; Ferreira et al., 2012; Li et al., 2012; Surget et al., 2011). The best-understood action of the drugs is to correct an imbalance in the levels of neurotransmitters in the brain

(Figure 13.11). For example, researchers know that the drug ketamine works for bipolar disorders because it changes the levels of brain neurotransmitters, but another study found that 79% of those who received even a single dose of ketamine also showed lower rates of depression, including thoughts of suicide (Zarate et al., 2012). The next time you hear someone say that mental illness isn't real or that "it's all in your head," you can describe to them how changing the levels of brain chemicals has been successful for both bipolar disorder and major depression.

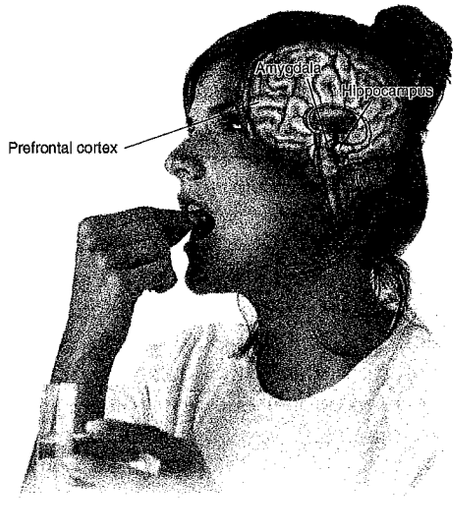
Q4

FIGURE 13.11 HOW ANTIDEPRESSANTS AFFECT THE BRAIN

Antidepressants work at the neural transmission level by increasing the availability of serotonin or norepinephrine, neurotransmitters that normally elevate mood and arousal. Shown here is the action of some of the most popular antidepressants—Prozac, Paxil, and other selective serotonin reuptake inhibitors (SSRIs).

A Serotonin's effect on the brain

People with depression are known to have lower levels of serotonin. Serotonin works in the prefrontal cortex, the hippocampus, and other parts of the brain to regulate mood, sleep, and appetite, among other things.



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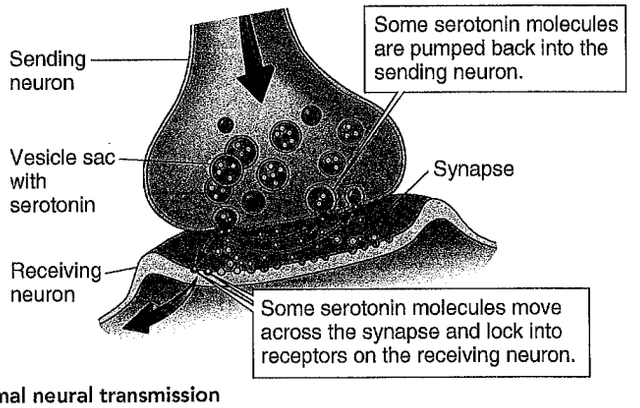
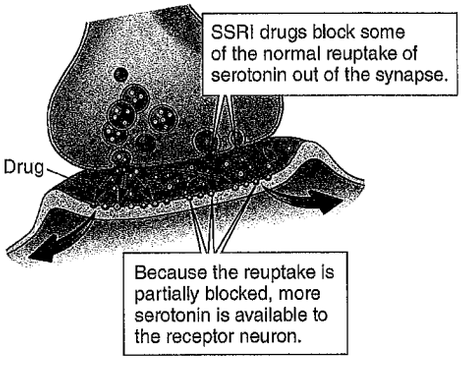


B Normal neural transmission

The sending neuron releases an excess of neurotransmitters, including serotonin. Some of the serotonin locks into receptors on the receiving neuron, but excess serotonin is pumped back into the sending neuron (called *reuptake*) for storage and reuse. If serotonin is reabsorbed too quickly, there is less available to the brain, which may result in depression.



C Partial blockage of reuptake by SSRIs

SSRIs, like Prozac, partially block the normal reuptake of excess serotonin, which leaves more serotonin molecules free to stimulate receptors on the receiving neuron. This increased neural transmission restores the normal balance of serotonin in the brain.

Electroconvulsive Therapy and Psychosurgery

There is a long history of using electrical stimulation to treat psychological disorders. In **electroconvulsive therapy (ECT)**, also known as electroshock therapy (EST), a moderate electrical current is passed through the brain between two electrodes placed on the outside of the head. The current triggers a widespread firing of neurons, or brief seizures. ECT can quickly reverse symptoms of certain mental illnesses and often works when other treatments have been unsuccessful. The electric current produces many changes in the central and peripheral nervous systems, including activation of the autonomic nervous system, increased secretion of various hormones and neurotransmitters, and changes in the blood–brain barrier **(Figure 13.12)**.

Electroconvulsive therapy (ECT) A biomedical therapy based on passing electrical current through the brain; it is used almost exclusively to treat serious depression when drug therapy fails.

Despite not knowing exactly how ECT works, or that it may cause some short-term memory loss immediately after treatment, and possible long-term memory

Evaluating Biomedical Therapies

Like all other forms of therapy, biomedical therapies have both proponents and critics.

Pitfalls of Psychopharmacology

Drug therapy poses several potential problems. First, although drugs may relieve symptoms for some people, they seldom provide cures. In addition, some patients become physically dependent on the drugs. Also, researchers are still learning about the drugs' long-term effects and potential interactions. Furthermore, psychiatric medications can cause a variety of side effects, ranging from mild fatigue to severe impairments in memory and movement. A final potential problem with drug treatment is that its relatively low cost and generally fast results have led to its overuse in some cases. Despite the problems associated with them, psychotherapeutic drugs have led to revolutionary changes in mental health. Before the use of drugs, some patients were destined to spend a lifetime in psychiatric institutions. Today, most improve enough to return to their homes and live successful lives if they continue to take their medications to prevent relapse.

Challenges to ECT and Psychosurgery

ECT currently serves as a valuable last-resort treatment for severe depression. However, similar benefits may be available through the latest advances in **repetitive transcranial magnetic stimulation (rTMS)**, which uses an electromagnet placed on the scalp that generates magnetic field pulses roughly the strength of an MRI scan **(Figure 13.13)**. To treat depression, the coil is usually placed over the prefrontal cortex, a region linked to deeper parts of the brain that regulate mood. Currently, rTMS's advantages over ECT are still unclear, but studies have shown marked improvement in depression, and patients experience fewer side effects (Berlim et al., 2013; Guse et al., 2013; Husain & Lisanby, 2011; Polley et al., 2011).

Because all forms of psychosurgery are potentially dangerous and have serious or even fatal side effects, some critics say that it should be banned altogether. Furthermore, the consequences are generally irreversible. For these reasons, psychosurgery is considered experimental and remains a highly controversial treatment.

Repetitive transcranial magnetic stimulation (rTMS) A biomedical treatment that uses repeated magnetic field pulses targeted at specific areas of the brain.

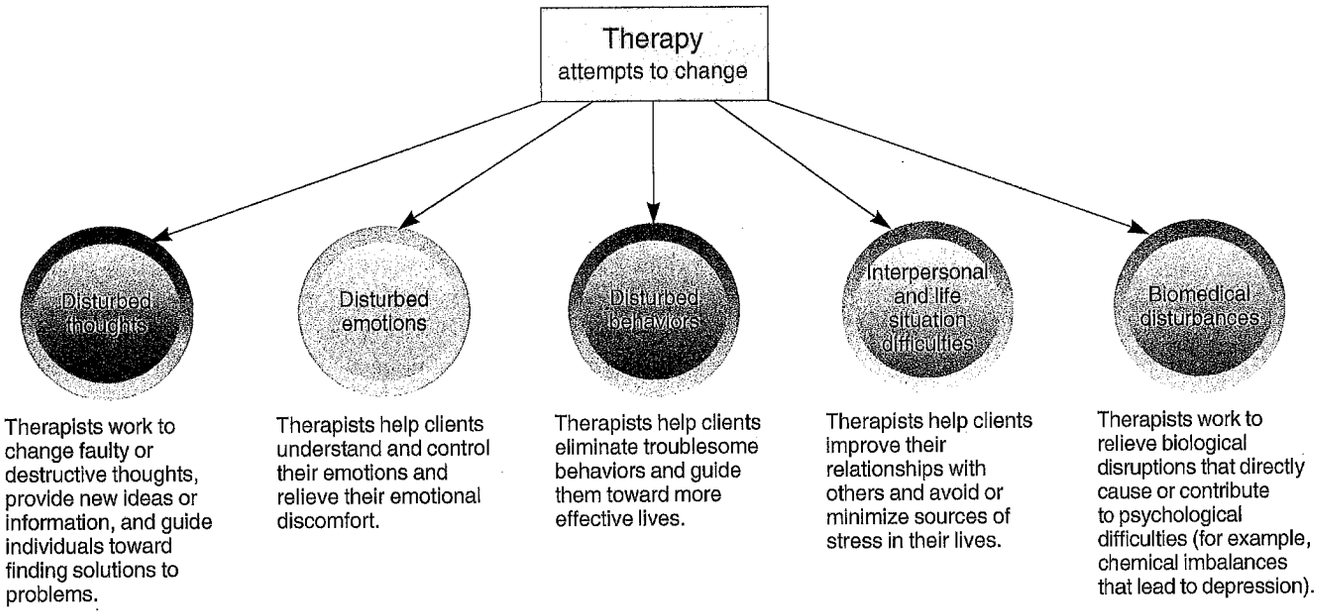
Richard T. Nowitz/Photo Researchers, Inc.

FIGURE 13.13 REPETITIVE TRANSCRANIAL MAGNETIC STIMULATION (rTMS)

Powerful electromagnets generate pulsed magnetic fields that are targeted at specific areas of the brain to treat depression.

FIGURE 13.14 THE FIVE MOST COMMON GOALS OF THERAPY

Most therapies focus on one or more of these five goals. Can you identify which would be of most interest to psychodynamic, humanistic, cognitive, and behavioristic therapists?



Although most therapists work with clients in several of these areas, the emphasis varies according to the therapist's training and whether it is psychodynamic, cognitive, humanistic, behaviorist, or biomedical. Clinicians who regularly borrow freely from various theories are said to take an **eclectic approach**.

Eclectic approach A perspective on therapy that combines techniques from various theories to find the most appropriate treatment.

Does therapy work? After years of controlled studies and *meta-analysis*—a method of statistically combining and analyzing data from many studies—researchers have fairly clear evidence that it does. As you can see in **Figure 13.15**, early meta-analytic reviews combined studies of almost 25,000 people and found that the average person who received treatment was better off than 75% of the untreated control clients (Smith et al., 1980; Smith & Glass, 1977).

Studies also show that short-term treatments can be as effective as long-term treatments and that most therapies are equally effective for various disorders (Dewan et al., 2011; Gillies et al., 2012; Messer et al., 2013; Wachtel, 2011). Even informal therapy techniques, like simple writing exercises, have led to increased marital satisfaction (see *Psych Science*).

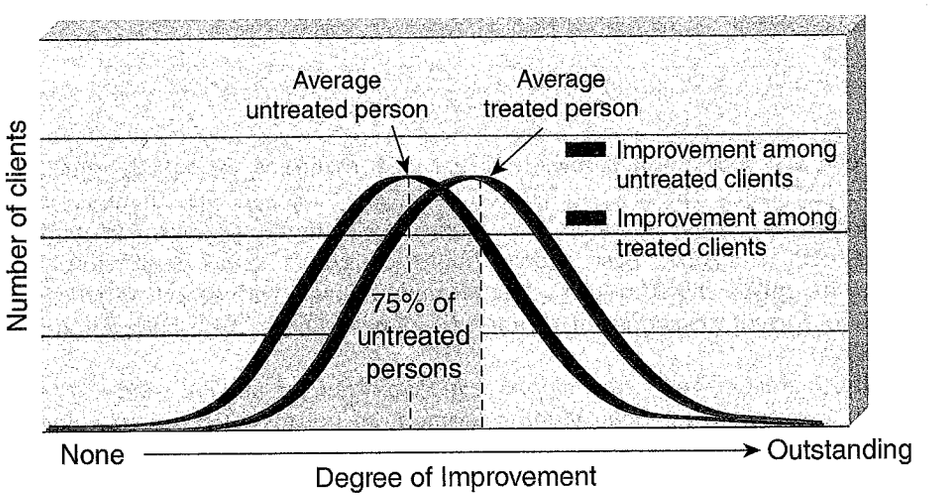


FIGURE 13.15 IS THERAPY GENERALLY EFFECTIVE?

The average person who receives therapy is better off after it than a similar person who does not get treatment (Campbell et al., 2013; Corey, 2013; Miller et al., 2013; Shedler, 2010; Smith et al., 1980; Smith & Glass, 1977). An analysis of more than 435 studies on the effectiveness of therapy for treating psychological disorders in children and adolescents revealed that therapy can lead to improvements in many different types of psychological disorders, including anxiety, autism, depression, disruptive behavior, eating problems, substance use, and traumatic stress (Chorpita et al., 2011).

Like all other movements, it has been criticized, but this type of empirically based research promises to be helpful for therapists and clients alike in their treatment decisions. For specific tips on finding therapy for yourself or a loved one, see *Choosing a Therapist.*

CHOOSING A THERAPIST | psychology and you

How do you find a good therapist for your specific needs? If you have the time (and money) to explore options, there are several steps you can take to find a therapist best suited to your specific goals. First, you might consult your psychology instructor, college counseling system, or family physician for specific referrals. In addition, most HMOs and health insurers provide lists of qualified professionals. Next, call the referred therapists and ask for an opportunity to discuss some questions. You could ask what their training was like, what approach they use, what their fees are, and whether they participate in your insurance plan.

Finding a therapist takes time and energy. If you need immediate help—you're having suicidal thoughts or are the victim of abuse—you should see if your community is one of the many that have medical hospital emergency services and telephone hotlines that provide counseling services on a 24-hour basis. In addition, most colleges and universities have counseling centers that provide immediate, short-term therapy to students free of charge.

Finally, if you're concerned about a friend or family member who might need therapy, you can follow the tips above to help locate a therapist and then possibly offer to go with him or her on their first appointment. If the individual refuses help and the problem affects you, it is often a good idea to seek therapy yourself. You will gain insights and skills that will help you deal with the situation more effectively.

For general help in locating a skilled therapist, identifying what types of initial questions to ask, learning how to gain the most benefits during therapy, and so on, consult the American Psychological Association (APA) website.

Think Critically

1. If you were looking for a therapist, would you want the therapist's gender to be the same as yours? Why or why not?
2. Do you think all insurance companies should be required to offer mental health coverage? Why or why not?

Therapy Formats

The therapies described earlier in this chapter are conducted primarily in a face-to-face, therapist-to-client format. In this section, we focus on several major alternatives: *group*, *family*, and *marital therapies*, which treat multiple individuals simultaneously, and *telehealth/electronic therapy*, which treats individuals via the Internet, e-mail, and/or smart phones.

Group Therapy

In **group therapy**, multiple people meet together to work toward therapeutic goals. Typically, a group of 8 to 10 people meet with a therapist on a regular basis to talk about problems in their lives.

A variation on group therapy is the **self-help group**. Unlike other group approaches, self-help groups are not guided by a professional. They are simply circles of people who share a common problem, such as alcoholism, obesity, or breast cancer, and who meet to give and receive support. Faith-based Twelve-Step programs such as Alcoholics Anonymous, Narcotics Anonymous, and Spenders

Group therapy A form of therapy in which a number of people meet together to work toward therapeutic goals.

Self-help group A leaderless or nonprofessionally guided group in which members assist each other with a specific problem, as in Alcoholics Anonymous.

often referred to as *telehealth*, allows clinicians to reach more clients and provide them with greater access to information regarding their specific problems (see *Real World Psychology* feature).

realworldpsychology **Therapy—Is There an App for That?** Studies have long shown that therapy outcomes improve with increased client contact, and the electronic/telehealth format may be the easiest and most cost-effective way to increase this contact (Campbell et al., 2013; DeAngelis, 2012; Myers & Turvey, 2013). For example, a recent study compared the effectiveness of cognitive behavioral therapy delivered over the telephone with the effectiveness of in-person visits for patients with major depressive disorder. The researchers found that those who received phone therapy showed improvement, but not as much as those who received face-to-face therapy. However, the phone therapy patients were more likely to continue with therapy over time (Mohr et al., 2012).

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Using electronic options such as the Internet and smart phones does provide alternatives to traditional one-on-one therapies, but, as you might expect, these unique approaches also raise concerns (DeAngelis, 2012; Nagy, 2012; Nelson et al., 2013). Professional therapists fear, among other things, that without interstate and international licensing, or a governing body to regulate this type of therapy, there are no means to protect clients from unethical practices or incompetent therapists. What do you think? Would you be more likely to participate in therapy if it were offered via your smart phone, e-mail, or a website? Or is this too impersonal and high tech for you?

Cultural Issues in Therapy

The therapies described in this chapter are based on Western European and North American culture. Does this mean they are unique? Or do these psychotherapists accomplish some of the same things that, say, a native healer or shaman does? Are there similarities in therapies across cultures? Conversely, are there fundamental therapeutic differences among cultures?

When we look at therapies in all cultures, we find that they have certain key features in common (Barnow & Balkir, 2013; Berry et al., 2011; Buss 2011; Markus & Kitayama, 2010; Matsumoto & Juang, 2013):

- **Naming the problem** People often feel better just knowing that others experience the same problem and that the therapist has had experience with it.
- **Demonstrating the right qualities** Clients must feel that the therapist is caring, competent, approachable, and concerned with finding solutions to their problems.
- **Establishing credibility** Word-of-mouth testimonials and status symbols, such as diplomas on the wall, establish a therapist's credibility. A native healer may earn credibility by serving as an apprentice to a revered healer.
- **Placing the problem in a familiar framework** Some cultures believe evil spirits cause psychological disorders, so therapy is directed toward eliminating these spirits. Similarly, in cultures that emphasize the importance of early childhood experiences and the unconscious mind as the cause of mental disorders, therapy will be framed around these familiar issues.
- **Applying techniques to bring relief** In all cultures, therapy includes action. Either the client or the therapist must do something. Moreover, what therapists do must fit the client's expectations—whether it is performing a ceremony to expel demons or talking with the client about his or her thoughts and feelings.
- **Meeting at a special time and place** The fact that therapy occurs outside the client's everyday experiences seems to be an important feature of all therapies.

or depression help decrease their greater problems with substance abuse and aggression?

If you've enjoyed this section on cultural and gender issues in therapy, as well as the earlier description of the various forms and formats of psychotherapy, you may be considering a possible career as a therapist. If so, see *Careers in Mental Health* below.

CAREERS IN MENTAL HEALTH | psychology and you

Most colleges have counseling or career centers with numerous resources and trained staff to help you with your career choices. However, to get you started and give you an overview of the general field of psychotherapy, we've included a brief summary of the major types of mental health professionals, their degrees, years of required education beyond the bachelor's degree, and type of training.

MAJOR TYPES OF MENTAL HEALTH PROFESSIONALS

Occupational Title	Degree	Nature of Training
Clinical psychologists	Ph.D. (doctor of philosophy), Psy.D. (doctor of psychology)	Most clinical psychologists have a doctoral degree with training in research and clinical practice and a supervised one-year internship in a psychiatric hospital or mental health facility. As clinicians, they work with patients suffering from mental disorders, but many also work in colleges and universities as teachers and researchers in addition to having their own private practice.
Counseling psychologists	Ph.D. (doctor of philosophy), Psy.D. (doctor of psychology), Ed.D. (doctor of education	Counseling psychologists have a doctoral degree with training that focuses on less severe mental disorders, such as emotional, social, vocational, educational, and health-related concerns. In addition to providing psychotherapy, other career paths are open, such as teaching, research, and vocational counseling.
Psychiatrists	M.D. (doctor of medicine)	After four years of medical school, an internship and residency in psychiatry are required, which includes supervised practice in psychotherapy techniques and biomedical therapies. In most states in the United States, psychiatrists, because they are M.D.s, are the only mental health specialists who can regularly prescribe drugs.
Psychiatric nurses	R.N. (registered nurse), M.A. (master of arts), Ph.D. (doctor of philosophy)	Psychiatric nurses usually have a bachelor's or master's degree in nursing, followed by advanced training in the care of mental patients in hospital settings and mental health facilities.
Psychiatric social workers	M.S.W. (master's in social work), D.S.W. (doctorate in social work), Ph.D. (doctor of philosophy)	Psychiatric social workers usually have a master's degree in social work, followed by advanced training and experience in hospitals or outpatient settings working with people who have psychological problems.
School psychologists	M.A. (master of arts), Ph.D. (doctor of philosophy), Psy.D. (doctor of psychology), Ed.D. (doctor of education)	School psychologists generally begin with a bachelor's degree in psychology, followed by graduate training in psychological assessment and counseling for school-related issues and problems.

- In **electroconvulsive therapy (ECT)**, an electrical current is passed through the brain, stimulating convulsions that produce changes in the central and peripheral nervous systems. ECT is used primarily in cases of severe depression that do not respond to other treatments.
- In **repetitive transcranial magnetic stimulation (rTMS)**, powerful electromagnets generate pulsed magnetic fields that are targeted at specific areas of the brain to treat depression.
- The most extreme biomedical therapy is **psychosurgery**. **Lobotomy**, an older form of psychosurgery, is now outmoded. Recently, psychiatrists have been experimenting with a more limited and precise surgical procedure called *deep brain stimulation* (DBS).

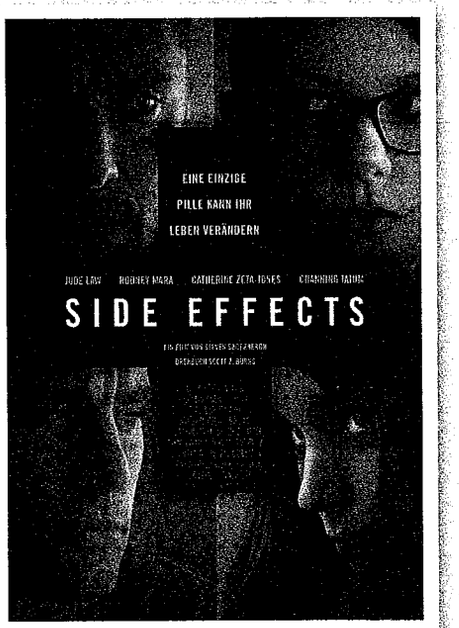
4 PSYCHOTHERAPY IN PERSPECTIVE 386

- All major forms of therapy are designed to address disturbed thoughts, disturbed emotions, disturbed behaviors, interpersonal and life situation difficulties, and biomedical disturbances. Research indicates that, overall, therapy does work.
- In **group therapy**, multiple people meet together to work toward therapeutic goals. A variation is the **self-help group**, which is not guided by a professional. Therapists often refer their patients to group therapy and self-help groups in order to supplement individual therapy.
- In family therapy, the aim is to change maladaptive family interaction patterns. All members of the family attend therapy sessions, though at times the therapist may see family members individually or in twos or threes.
- Therapies in all cultures have certain key features in common; however, there are also important differences among cultures. Therapists must recognize cultural differences in order to build trust with clients and effect behavioral change. Therapists must also be sensitive to possible gender issues in therapy.

applyingrealworldpsychology

We began this chapter with five intriguing Real World Psychology questions, and you were asked to revisit these questions at the end of each section. Questions like these have an important and lasting impact on all of our lives. See if you can answer these additional critical thinking questions related to real world examples.

1. In the 2013 movie *Side Effects*, Rooney Mara and Channing Tatum portray a successful young couple, Emily and Martin, whose entire world falls apart when Emily's psychiatrist prescribes a new (fictional) psychoactive drug called Ablixa to treat her anxiety. The true *side effects* of the drug, as well as the underlying motivations and mental health of the main characters, are revealed only during the film's final scenes. How might this film contribute to negative stereotypes of psychotherapy and psychopharmacology?
2. Given that advertising for the fictional drug in this *Side Effects* movie closely matches the ads for actual psychoactive drugs, what special dangers and applications does widespread advertising for psychotherapeutic drugs pose for the real world?
3. Can you think of a Hollywood film that offers a positive portrayal of psychotherapy and/or psychopharmacology?
4. You undoubtedly had certain beliefs and ideas about therapy before reading this chapter. Has studying this chapter changed any of those beliefs and ideas?
5. Which form of therapy described in this chapter do you personally find most appealing? Why?

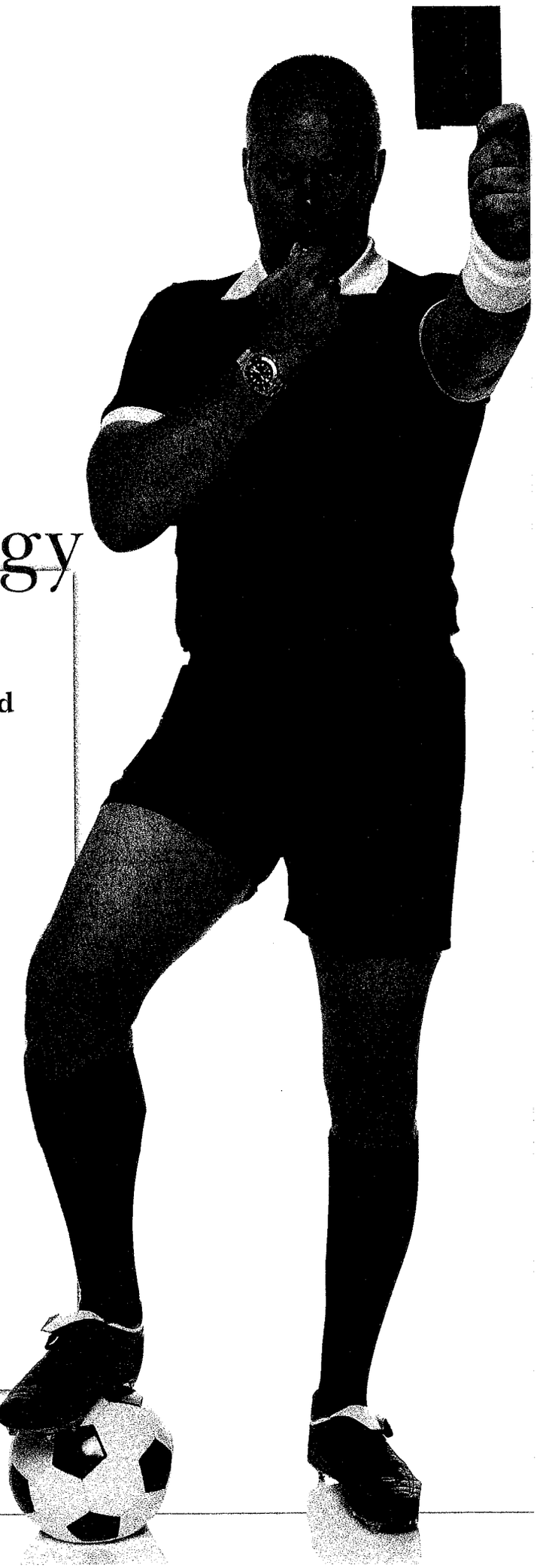


Snap Stills/Rex Features/AP Photos

Key Terms

RETRIEVAL PRACTICE Write a definition for each term before turning back to the referenced page to check your answer.

- active listening 372
- antianxiety drugs 382
- antidepressant drugs 382
- antipsychotic drugs 382
- aversion therapy 378
- behavior therapy 377
- biomedical therapy 381
- client-centered therapy 372
- cognitive restructuring 373
- cognitive therapy 373
- cognitive-behavior therapy (CBT) 375
- dream analysis 370
- eclectic approach 387
- electroconvulsive therapy (ECT) 383
- empathy 372
- free association 369
- genuineness 372
- group therapy 389
- humanistic therapy 371
- interpretation 370
- lobotomy 384
- modeling therapy 379
- mood-stabilizer drugs 382
- psychoanalysis 369
- psychodynamic therapy 371
- psychopharmacology 381
- psychosurgery 384
- psychotherapy 369
- rational-emotive behavior therapy (REBT) 374
- repetitive transcranial magnetic stimulation (rTMS) 385
- resistance 370
- self-help group 389
- systematic desensitization 377
- transference 370
- unconditional positive regard 372



realworldpsychology

THINGS YOU'LL LEARN IN CHAPTER 14

Q1 Why do athletes often blame their losses on bad officiating?

Q2 If popular high-school students are anti-drinking, does that reduce underage drinking among their peers?

Q3 Are women less likely than men to share their opinions in a group?

Q4 Are men still more likely to get hired than equally qualified women?

Q5 How does simple nearness (proximity) influence attraction?

THROUGHOUT THE CHAPTER, MARGIN ICONS FOR Q1–Q5 INDICATE WHERE THE TEXT ADDRESSES THESE QUESTIONS.

woman peeking through paper hole: © PIKSEL/iStockphoto;
two children studying: © Gelpi JM/Shutterstock; resume: © mstahlphoto/iStockphoto;
beer: © flubydust/iStockphoto; soccer referee: © RTimages/iStockphoto

SOCIAL COGNITION

RETRIEVAL PRACTICE While reading the upcoming sections, respond to each Learning Objective in your own words. Then compare your responses with those found at www.wiley.com/college/huffman.

LEARNING OBJECTIVES

1. **DESCRIBE** the field of social psychology.
2. **EXPLAIN** how attributions and their errors affect the way we perceive and judge others.
3. **IDENTIFY** attitudes and their three components.
4. **SUMMARIZE** how attitudes are formed and changed.
5. **DISCUSS** how culture affects cognitive dissonance.

Social psychology, one of the largest branches in the field of psychology, focuses on how others influence our thoughts, feelings, and actions. In turn, one of its largest and most important subfields, **social cognition**, examines the way we think about and interpret ourselves and others. In this section, we will look at two of the most important topics in social cognition—*attributions* and *attitudes*.

Social psychology The branch of psychology that studies how others influence our thoughts, feelings, and actions; it also studies group and intergroup phenomena.

Social cognition How we think about and interpret ourselves and others.

Attributions

Have you ever been in a serious verbal fight with a loved one—perhaps a parent, close friend, or romantic partner? If so, how did you react? Were you overwhelmed with feelings of anger? Did you attribute the fight to the other person's ugly, mean temper and consider ending the relationship? Or did you calm yourself with thoughts of how he or she is normally a rational person and therefore must be unusually upset by something that happened at work or college?

Can you see how these two alternative explanations, or **attributions**, for the causes of behavior or events can either destroy or maintain relationships? The study of attributions is a major topic in social cognition and social psychology. Everyone wants to understand and explain why people behave as they do and why events occur as they do. Humans are known to be the only reason-seeking animals! But social psychologists have discovered another explanation: Developing logical attributions for people's behavior makes us feel safer and more in control (Bodenhausen & Morales, 2013; Cushman & Greene, 2012; Ferrucci et al., 2011; Heider, 1958). In addition, they've found that the key to making correct attributions begins with the decision of whether a given action stems mainly from the person's internal disposition or from the external situation. Unfortunately, our attributions are frequently marred by two major errors: the *fundamental attribution error (FAE)* and the *self-serving bias*. Let's explore each of these.

Attribution The principles we follow when making judgments about the causes of events, others' behavior, and our own behavior.

Fundamental Attribution Error (FAE)

Think back to the example above. Do you recognize that attributing the fight to the bad character of the other person without considering possible situational factors, like pressures at work, may be the result of your own misguided bias in thinking? Suppose a new student joins your class and seems distant, cold, and uninterested in interaction. It's easy to conclude that she's unfriendly, and maybe even "stuck-up"—a dispositional (personality) attribution. If you later saw her in a one-to-one interaction with close friends, you might be surprised to find that she is very warm and friendly. In other words, her behavior depends on the situation. This bias toward personal, dispositional factors rather than situational factors in our explanations for others' behavior is so common that it is called the **fundamental attribution error (FAE)** (Arkes & Kajdasz, 2011; Coleman, 2013; Ross, 1977).

One reason for the FAE is that human personalities and behaviors are more salient or noticeable than situational factors. The **saliency bias** helps explain why people sometimes suggest that homeless people begging for money "should just go out and get a job"—a phenomenon also called "blaming the victim."

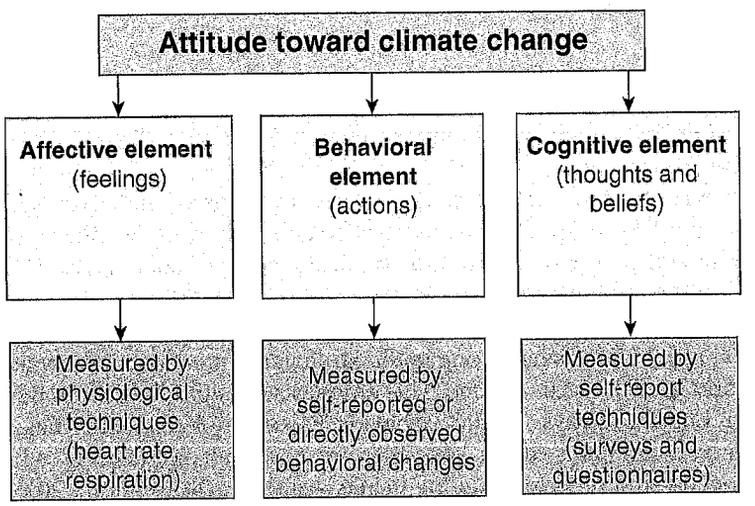
Keep in mind that when we focus on possible *situational* influences on behavior, we're more likely to make better and more accurate judgments of the causes of events and other people's behavior. Unfortunately, given people's enduring personality traits (Chapter 11), our shared tendency to take cognitive shortcuts (Chapter 8), and the saliency bias, we more often focus on dispositional (personality) factors—thus leading us to commit the FAE.

Fundamental attribution error (FAE) The tendency of observers to overestimate the influence of internal, dispositional factors on a person's behavior, while underestimating the impact of external, situational factors.

Saliency bias A type of attributional bias in which people tend to focus on the most noticeable (salient) factors when explaining the causes of behavior.

FIGURE 14.2 ATTITUDE FORMATION

When social psychologists study attitudes, they measure each of the three ABC components: Affective, Behavioral, and Cognitive.



reflect our **attitudes**, which are *learned* predispositions to respond to a particular object in a particular way. Social psychologists generally agree that most attitudes have three ABC components: *affect*, or feelings; *behavior*, or actions; and *cognitions*, or thoughts and beliefs **(Figure 14.2)**.

Attitude The learned predisposition to respond cognitively, affectively, and behaviorally to a particular object, person, place, thing, or event in an evaluative way.

Attitude Formation

As mentioned, we tend to learn our attitudes generally from direct instruction, through personal experiences, and by watching others. In some cases, these sources may differ, depending on our gender. For example, researchers have found that teenage boys are more likely to learn sexual attitudes from media representations of sexual behavior, whereas teenage girls tend to learn their sexual attitudes from their mothers, as long as they feel close to their mothers (Vanderbosch & Eggermont, 2011).

HEALTH AND SELF-IMAGE realworldpsychology

Given the high prevalence of very thin women and lean, "ripped" men displayed on magazines, TV, and movies, it's easy to see why many people in our Western culture develop a shared preference for a certain, limited body type. Thankfully, research finds that just showing 100 women photographs of plus-size models (with a minimum clothing size of 16 and a BMI between 36 and 42) caused them to change their initial attitudes, which had been to prefer the thin ideal (Boothroyd et al., 2012). Can you see how ads that offer more realistic images, as well as the devastating effects of anorexia (like the two photos on the right), might improve the overall health and self-image of both men and women? Sadly, the model in the photo on the far right, Isabel Caro, died of anorexia in 2010 at age 28.

JM5 WENN Photos/NewsCom

Agencia el Universal/El Universal de Mexico/NewsCom

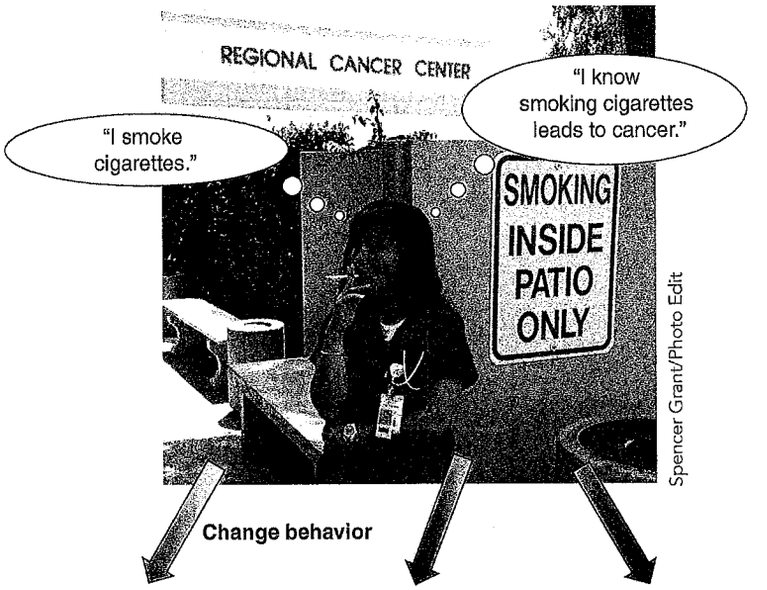
Attitude Change

Although attitudes begin to form in early childhood, they're obviously not permanent, a fact that advertisers and politicians know and exploit. As we've just seen in the study described above, we can sometimes change attitudes through experiments. However, a much more common method is to make direct, persuasive appeals, such as in ads that say, "Friends Don't Let Friends Drive Drunk!" Interestingly, psychologists have identified an even more efficient strategy, which is to create contradictions between our attitudes, or between our attitudes and our behaviors, that lead to

FIGURE 14.3 REDUCING COGNITIVE DISSONANCE

Why do some health professionals, who obviously know the dangers of smoking, continue to smoke?

1. When inconsistencies or conflicts exist between our thoughts, feelings, and actions, they can lead to strong tension and discomfort (*cognitive dissonance*).



2. To reduce this cognitive dissonance, we are motivated to change our behavior or our attitude.

3a Changing behavior, such as quitting smoking, can be hard to do. → "I don't smoke cigarettes any more."

3b If unable or unwilling to change their behavior, individuals can use one or more of the four methods shown here to change their attitude.

- **Change perceived importance of one of the conflicting cognitions:** "Experiments showing that smoking causes cancer have only been done on animals."
- **Modify one or both of the conflicting cognitions:** "I don't smoke that much."
- **Add additional cognitions:** "I only eat healthy foods, so I'm better protected from cancer."
- **Deny conflicting cognitions are related:** "There's no real evidence linking cigarettes and cancer."

RETRIEVAL PRACTICE: SOCIAL COGNITION

Self-Test

Completing this self-test and comparing your answers with those in Appendix B provides immediate feedback and helpful practice for exams. Additional interactive, self-tests are available at www.wiley.com/college/huffman.

1. The study of how other people influence our thoughts, feelings, and actions is called _____.

a. social cognition
b. social science
c. social psychology
d. social influence

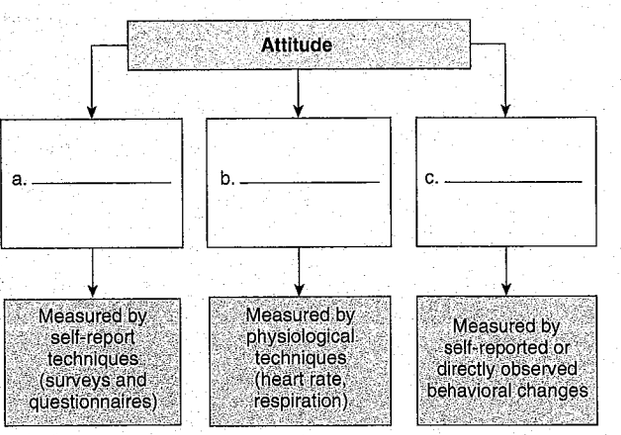
2. The principles we follow in making judgments about the causes of events, others' behavior, and our own behavior are known as _____.

a. impression management
b. stereotaxic determination
c. attributions
d. person perception

3. The two major attribution mistakes we make are the _____ and the _____.

a. fundamental attribution error; self-serving bias
b. situational attributions; dispositional attributions
c. actor bias; observer bias
d. stereotypes; biases

4. Label the three components of attitudes.



5. According to _____ theory, we're motivated to change our attitudes because of tension created by a mismatch between two or more competing attitudes or between our attitudes and behavior.

a. social learning
b. cognitive dissonance
c. defense mechanisms
d. power of inconsistencies

X, an obvious wrong answer! When the second, third, fourth, and fifth participants also say line A, you really start to wonder: "What's going on here? Are they wrong, or am I?"

What do you think you would do at this point in the experiment? Would you stick with your convictions and say line B, regardless of what the others have answered? Or would you go along with the group? In the original version of this experiment, conducted by Solomon Asch (1951), six of the seven participants were actually *confederates* of the experimenter (that is, they were working with the experimenter and purposely gave wrong answers). Their incorrect responses were designed to test the participant's degree of **conformity**.

Conformity Changes in behavior, attitudes, or values because of real or imagined group pressure.

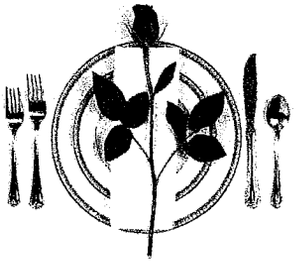
More than one-third of Asch's participants conformed—they agreed with the group's obviously incorrect choice. (Participants in a control group experienced no group pressure and almost always chose correctly.) Asch's study has been conducted dozens of times, in at least 17 countries, and always with similar results (Mori & Arai, 2010; Tennen et al., 2013).

Why would so many people conform? To the onlooker, conformity is often difficult to understand. Even the conformer sometimes has a hard time explaining his or her behavior. Let's look at three factors that drive conformity:

- **Normative social influence** One of the first reasons we conform is that we want to go along with group *norms*, which are expected behaviors generally adhered to by members of a group. Most often norms are quite subtle and only implied (see *Psychology and You* and *Cultural Norms for Personal Space*).

Normative social influence Conforming to group pressure out of a need to be liked, accepted, and approved of by others.

psychology and you **Norms in Everyday Life** Have you ever asked what others are wearing to a party or copied your neighbor at a dinner party to make sure you picked up the right fork? We generally submit to normative social influence out of our need for approval and acceptance by the group and because conforming to group norms makes us feel good (Irwin & Simpson, 2013).



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CULTURAL NORMS FOR PERSONAL SPACE
realworldpsychology

Culture and socialization have a lot to do with shaping norms for personal space. If someone invades the invisible "personal bubble" around our bodies, we generally feel very uncomfortable. This may help explain why some people from the United States feel awkward when traveling to Mediterranean and Latin American countries where people generally maintain smaller interpersonal distances (Axtell, 2007; Steinhart, 1986). As you can see in this photo, these Middle Eastern men are apparently comfortable with a small personal space and with showing male-to-male affection.

Interestingly, children in our own Western culture also tend to stand very close to others until they are socialized to recognize and maintain greater personal distance. Furthermore, friends stand closer than strangers, women tend to stand closer than men, and violent prisoners prefer approximately three times as much personal space as nonviolent prisoners (Axtell, 2007; Gilmour & Walkey, 1981; Lawrence & Andrews, 2004).

AFP/Getty Images, Inc.

Think Critically

1. How might cultural differences in personal space help explain why U.S. travelers abroad are sometimes seen as being "too loud and brassy"?
2. Given that men and women have different norms for personal space, what effect might this have on their relationships?

However, on some occasions, it is important not to conform or obey. We don't want teenagers (or adults) engaging in risky sex or drug use just to be part of the crowd. And we don't want soldiers (or anyone else) mindlessly following orders just because they were told to do so by an authority figure. Recognizing and resisting destructive forms of obedience are particularly important to our society—and to social psychology. Let's start with an examination of a classic series of studies on obedience by Stanley Milgram (1963, 1974).

Imagine that you have responded to a newspaper ad seeking volunteers for a study on memory. At the Yale University laboratory, an experimenter explains to you and another participant that he is studying the effects of punishment on learning and memory. You are selected to play the role of the "teacher." The experimenter leads you into a room where he straps the other participant—the "learner"—into a chair. He applies electrode paste to the learner's wrist "to avoid blisters and burns" and attaches an electrode that is connected to a shock generator.

Next, you're led into an adjacent room and told to sit in front of this same shock generator, which is wired through the wall to the chair of the learner. (The setup for the experiment is illustrated in **Figure 14.6**.*) The shock machine consists of 30 switches representing successively higher levels of shock, from 15 volts to 450 volts. Written labels appear below each group of switches, ranging from "Slight Shock" to "Danger: Severe Shock," all the way to "XXX." The experimenter explains that it is your job to teach the learner a list of word pairs and to punish any errors by administering a shock. With each wrong answer, you are to increase the shock by one level.*

You begin teaching the word pairs, but the learner's responses are often wrong. Before long, you are inflicting shocks that you can only assume must be extremely painful. After you administer 150 volts, the learner begins to protest: "Get me out of here . . . I refuse to go on."

You hesitate, and the experimenter tells you to continue. He insists that even if the learner refuses to answer, you must keep increasing the shock levels. But the other person is obviously in pain. What will you do?

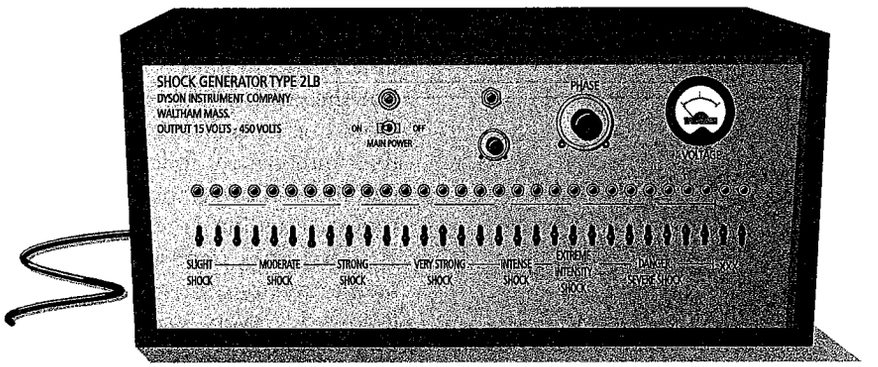
It's important to note that the "learners" were confederates, who helped with the experiment and never received actual shocks. They only pretended to be in pain. However, the real participants, the "teachers," believed they were delivering shocks to a person in obvious pain. Although the "teachers" sweated, trembled, stuttered, laughed nervously, and repeatedly protested that they did not want to hurt the learner, they still obeyed!

The psychologist who designed this study, Stanley Milgram, was actually investigating not punishment and learning but obedience to authority: Would participants obey the experimenter's prompts and commands to shock another human being? In Milgram's public survey, fewer than 25% thought they would go beyond 150 volts. And no respondents predicted that they would go past the 300-volt level. Yet 65% of the teacher-participants in this series of studies obeyed completely—going all the way to the end of the scale (450 volts), even beyond the point when the "learner" (Milgram's confederate) stopped responding altogether.

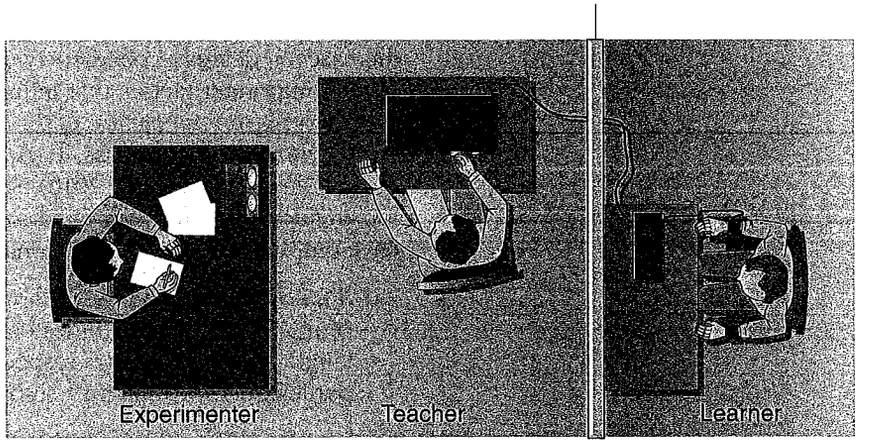
Even Milgram was surprised by his results. Before the study began, he polled a group of psychiatrists, and they predicted that most people would refuse to go

FIGURE 14.6 MILGRAM'S STUDY ON OBEDIENCE

Under orders from an experimenter, would you, as "teacher," use this shock generator to shock a man (the "learner") who is screaming and begging to be released? Few people believe they would, but research shows otherwise.



Milgram's Shock Generator



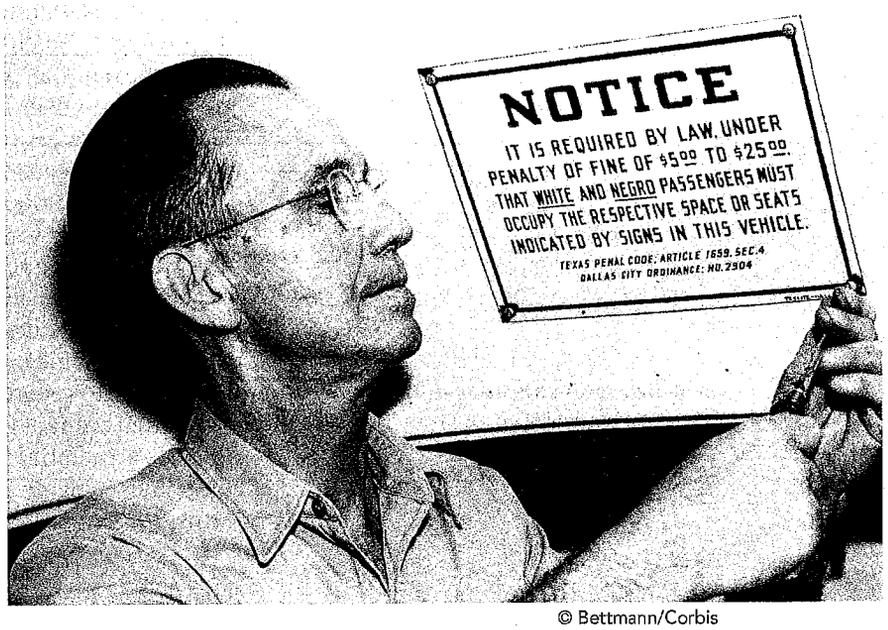
Experimental Set Up

socialization toward the value of scientific research and respect for the experimenter's authority. They couldn't suddenly step outside themselves and question the morality of this particular experimenter and his orders.

- **The foot-in-the-door technique** The step-wise actions in many obedience situations may also help explain why so many people were willing to give the maximum shocks in Milgram's study. The initial mild level of shocks may have worked as a **foot-in-the-door technique**, in which a first, small request is used as a setup for later, larger requests. Once Milgram's participants complied with the initial request, they might have felt obligated to continue.
- **Relaxed moral guard** One common intellectual illusion that hinders critical thinking about obedience is the belief that only evil people do evil things, or that evil announces itself. The experimenter in Milgram's study looked and acted like a reasonable person who was simply carrying out a research project. Because he was not seen as personally corrupt and evil, the participants' normal moral guard was down, which can maximize obedience. As philosopher Hannah Arendt has suggested, the horrifying thing about the Nazis was not that they were so deviant but that they were so "terrifyingly normal."

Foot-in-the-door technique An initial, small request is used as a setup for a later, larger request.

realworldpsychology **A Model of Civil Disobedience** Although the forces underlying obedience can be loud and powerful, even one quiet, courageous, dissenting voice can make a difference. Perhaps the most beautiful and historically important example of just this type of bravery occurred in Alabama in 1955. Rosa Parks boarded a bus and, as expected in those times, obediently sat in the back section marked "Negroes." When the bus became crowded, the driver told her to give up her seat to a white man. Surprisingly for those days, Parks quietly but firmly refused and was eventually forced off the bus by police and arrested. This single act of disobedience was a major catalyst for the civil rights movement and the later repeal of Jim Crow laws in the South. Today, Rosa Parks's courageous stand also inspires the rest of us to carefully consider when it is appropriate and good to obey authorities and when we must resist unethical or dangerous demands.



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Group Processes

Although we seldom recognize the power of group membership, social psychologists have identified several important ways that groups affect us.

Group Membership

How do the roles that we play within groups affect our behavior? This question fascinated social psychologist Philip Zimbardo. In his famous study at Stanford University, 24 carefully screened, well-adjusted young college men were paid $15 a day for participating in a two-week simulation of prison life (Haney et al., 1978; Zimbardo, 1993).

The students were randomly assigned to the role of either prisoner or guard. Prisoners were "arrested," frisked, photographed, fingerprinted, and booked at the police station. They were then blindfolded and driven to the "Stanford Prison." There, they were given ID numbers, deloused, issued prison clothing (tight nylon caps, shapeless gowns, and no underwear), and locked in cells. Participants assigned to be guards were outfitted with official-looking uniforms, official police nightsticks ("billy clubs"), and whistles, and they were given complete control.

Don Emmert/AFP/Getty Images

FIGURE 14.9 LOST IN THE CROWD

One of the most compelling explanations for deindividuation is the fact that the presence of others tends to increase arousal and feelings of anonymity, which is a powerful disinhibitor. As you can see in this photo, deindividuation can be healthy and positive when we're part of a happy, celebratory crowd. However, it also helps explain why vandalism seems to increase on Halloween (when people commonly wear masks) and why most crimes and riots occur at night—under the cover of darkness (Haines & Mann, 2011; Lammers & Stapel, 2011; Rodrigues et al., 2005; Spears, 2011; Zimbardo, 2007). Can you imagine your own behavior changing under such conditions?

who worked in a partisan workplace became more polarized in their opinions than those who worked in less partisan environments (Jones, 2013).

Group polarization is also important within the legal system. Imagine yourself as a member of a jury **(Figure 14.10)**. In an ideal world, attorneys from both sides would present the essential facts of the case. Then, after careful deliberation, each individual juror would move from his or her initially neutral position toward the defendant to a more extreme position—either conviction or acquittal. In a not-so-ideal world, the quality of legal arguments from opposing sides may not be equal, you and the other members of the jury may not be neutral at the start, and group polarization may cause most jurors to make riskier or more conservative judgments than they would have on their own.

A related phenomenon is **groupthink (Figure 14.11)**. When a group is highly cohesive (a couple, a family, a panel of military advisers, an athletic team), the members' desire for agreement may lead them to ignore important information or points of view held by outsiders or critics (Hergovich & Olbrich, 2003; Hogg, 2013; Vaughn, 1996). To make matters worse, women are especially likely to refrain from speaking up in a group setting, so their opinions are less likely to be heard than men's (Karpowitz et al., 2012).

Groupthink The faulty decision making that occurs when a highly cohesive group strives for agreement, especially if it is in line with the leader's viewpoint, and avoids contradictory information.

Q3

Many highly-publicized tragedies—from Franklin Roosevelt's failure to anticipate the attack on Pearl Harbor in 1941 to the Jerry Sandusky Penn State sex scandal in 2012—have been blamed on groupthink. In addition, groupthink may have contributed to the losses of the space shuttles *Challenger* and *Columbia*, the terrorist attack of September 11, 2001, the war in Iraq, and other important decisions (Barlow, 2008; Burnette et al., 2011; Ehrenreich, 2004; Janis, 1972, 1989; Post, 2011; Redd & Mintz, 2013; Strozier, 2011).

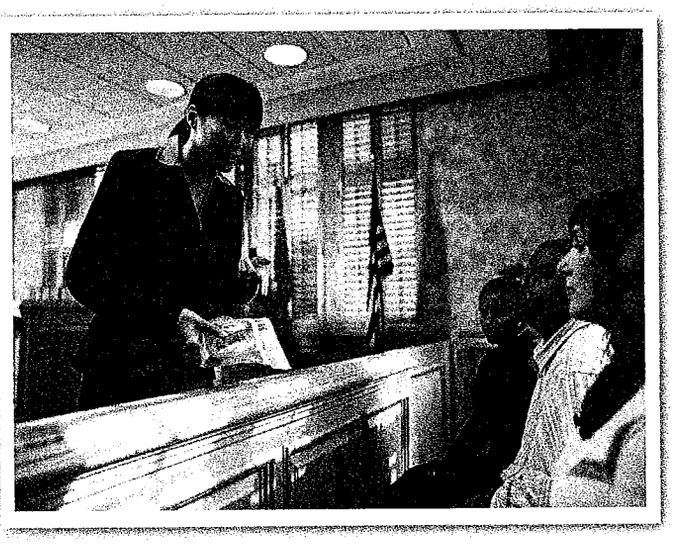

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FIGURE 14.10 JURIES AND GROUP POLARIZATION

When might group polarization be both a desirable and an undesirable part of jury deliberation?

Think Critically

1. Explain how group membership has affected your own behavior and decision making.
2. How might Milgram's results relate to some aspects of modern warfare?
3. Have you ever done something wrong in a group that you would not have done if you were alone? What have you learned from this chapter that might help you avoid this behavior in the future?

realworldpsychology

If popular high-school students are anti-drinking, does that reduce underage drinking among their peers?

Are women less likely than men to share their opinions in a group?

HINT: LOOK IN THE MARGIN FOR Q2 AND Q3

SOCIAL RELATIONS

RETRIEVAL PRACTICE While reading the upcoming sections, respond to each Learning Objective in your own words. Then compare your responses with those found at www.wiley.com/college/huffman.

LEARNING OBJECTIVES

1. **EXPLAIN** the difference between prejudice and discrimination.
2. **IDENTIFY** the factors that contribute to, and those that combat, prejudice and discrimination.
3. **DISCUSS** aggression and the factors that increase and decrease it.
4. **DESCRIBE** altruism and the factors that increase and decrease it.
5. **SUMMARIZE** the factors that influence interpersonal attraction and love.

Kurt Lewin (1890–1947), often considered the "father of social psychology," was among the first people to suggest that all behavior results from interactions between the individual and the environment. In this final section, on **social relations**, we explore how we develop and are affected by interpersonal relations, including prejudice, aggression, altruism, and interpersonal attraction.

Social relations How we develop and are affected by interpersonal relationships.

Prejudice and Discrimination

Prejudice, which literally means prejudgment, creates enormous problems for its victims and also limits a perpetrator's ability to accurately judge others and to process information.

Like all other attitudes, prejudice is composed of three ABC elements: *affective* (emotions about the group), *behavioral* (negative actions toward members of the group), and *cognitive* (**stereotypes** about group members). Although the terms *prejudice* and *discrimination* are often used interchangeably, they are not the same. Prejudice refers to an attitude, whereas **discrimination** refers to action (Fiske, 1998). The two often coincide, but not always **(Figure 14.12)**.

Prejudice A learned, generally negative, attitude toward members of a group; it includes thoughts (stereotypes), feelings, and behavioral tendencies (discrimination).

Stereotypes Generalizations about a group of people in which the same characteristics are assigned to all members of the group; also, the cognitive component of prejudice.

Discrimination Negative behaviors directed at others because of their membership in a particular group.

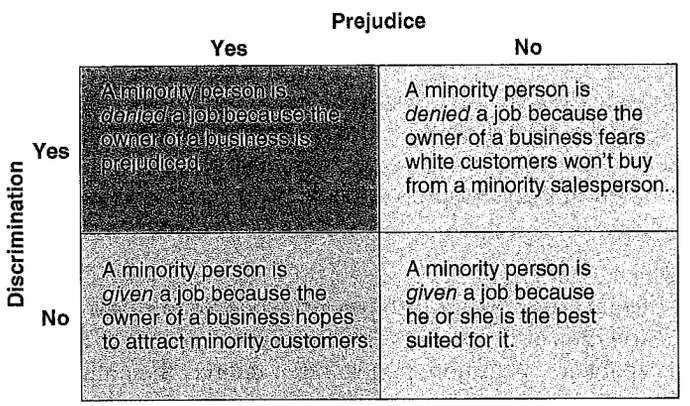

FIGURE 14.12 PREJUDICE AND DISCRIMINATION

Prejudice and discrimination are closely related, but either condition can exist without the other. The only situation without prejudice or discrimination in this example occurs when someone is given a job simply because he or she is the best candidate.

toward an alternative, innocent target, known as a *scapegoat.* There is strong historical evidence of the dangers of scapegoating. Jewish people were blamed for economic troubles in Germany before World War II. In the United States beginning in the 1980s, gay men were blamed for the AIDS epidemic, and Hispanic immigrant groups are now being blamed for the nation's recent economic troubles **(Figure 14.13)**.

Mental Shortcuts

Prejudice is also believed to develop from everyday *mental shortcuts* that we create to simplify our complex social world (Ambady & Adams, 2011; Dotsch et al., 2011; Ferguson & Porter, 2013; Sternberg, 2007, 2009). Stereotypes allow quick judgments about others, thereby freeing up mental resources for other activities. Note, however, that these mental shortcuts too often lead to negative outcomes. For example, when science faculty were sent identical résumés from a male and a female student applying for a job as a laboratory manager, both male and female faculty members rated the male applicant as more competent and hirable than the female (Moss-Racusin et al., 2012). Can you see how such stereotypes might have serious real-world consequences for women in the work force—especially for those trying to enter careers in stereotypically male fields?

People use stereotypes as mental shortcuts when they classify others in terms of their membership in a group. Given that people generally classify themselves as part of the preferred group, they also create ingroups and outgroups. An *ingroup* is any category to which people see themselves as belonging; an *outgroup* is any other category.

Compared with the way they judge members of the outgroup, people tend to judge ingroup members as being more attractive, having better personalities, and so on—a phenomenon known as **ingroup favoritism** (DiDonato et al., 2011; Jackson & Rose, 2013; Reyes-Jaquez & Echols, 2013). People also tend to recognize greater diversity among members of their ingroup than they do among members of outgroups (Bendle, 2011; Kang & Lau, 2013; Ratner & Amodio, 2013). A danger of this **outgroup homogeneity effect** is that when members of minority groups are not recognized as varied and complex individuals, it is easier to treat them in discriminatory ways.

A good example is war. Viewing people on the other side as simply faceless enemies makes it easier to kill large numbers of soldiers and civilians. This dehumanization and facelessness also help perpetuate our current high levels of fear and anxiety associated with terrorism (Buckels & Trapnell, 2013; Dunham, 2011; Hutchison & Rosenthal, 2011; Savage, 2013).

Ingroup favoritism Viewing members of the ingroup more positively than members of an outgroup.

Outgroup homogeneity effect Judging members of an outgroup as more alike and less diverse than members of the ingroup.

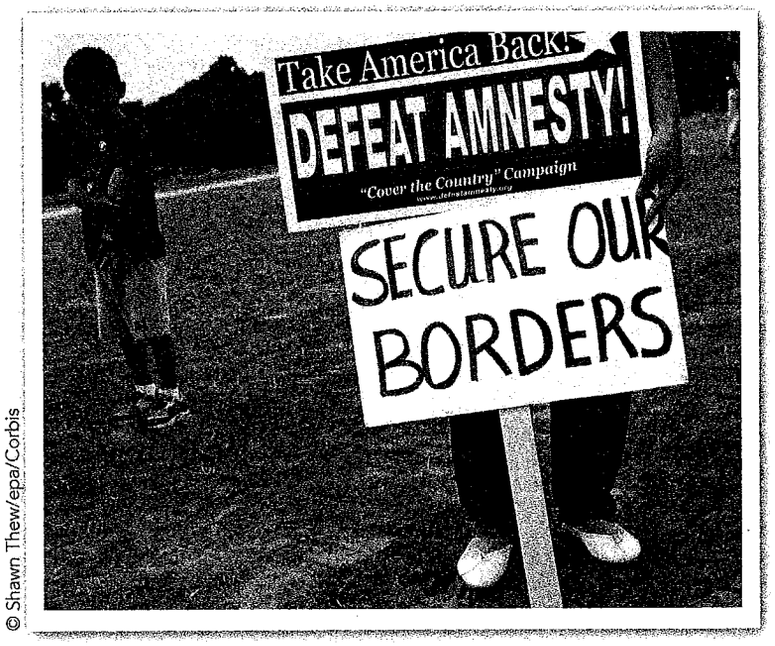

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FIGURE 14.13 PREJUDICE AND IMMIGRATION

Can you identify which of the five sources of prejudice best explains this behavior?

Dovidio et al., 2011; Hodson & Hewstone, 2013; Orta, 2013). However, as you just discovered with Sherif's study of the boys at the summer camp, contact can sometimes increase prejudice. Increasing contact works only under certain conditions that provide for *close interaction*, *interdependence* (superordinate goals that require cooperation), and *equal status*.

Cognitive Retraining One of the most recent strategies in prejudice reduction requires taking another's perspective or undoing associations of negative stereotypical traits (Biernat & Danaher, 2013; Müller et al., 2011; Todd et al., 2011). For example, televised specials and recent movies, like *42* and *The Butler*, help the viewing public understand and empathize with the pressures and heroic struggles of Blacks to gain equal rights. People can also learn to be less prejudiced if they are taught to selectively pay attention to *similarities* rather than *differences* (Motyl et al., 2011; Phillips & Ziller, 1997). Can you see how emphasizing gender differences (as in the book title *Men Are from Mars, Women Are from Venus*) may increase and perpetuate gender stereotypes?

Cognitive Dissonance One of the most efficient methods to change an attitude uses the earlier discussed principle of *cognitive dissonance*. Each time we meet someone who does not conform to our prejudiced views, we experience dissonance—"I thought all gay men were effeminate. This guy is a deep-voiced professional athlete. I'm confused." To resolve the dissonance, we can maintain our stereotypes by saying, "This gay man is an exception to the rule." However, if we continue our contact with a large variety of gay men, or when the media shows more instances of non-stereotypical gay individuals, this "exception to the rule" defense eventually breaks down and attitude change occurs. As you may recall from Chapter 10, on May 6, 2013, Jason Collins became the first openly male gay athlete playing in a major American team sport. Why did he decide to publicly announce his sexual orientation? One of his many reasons was: "I want to march for tolerance, acceptance, and understanding" (Collins & Lidz, 2013).

Aggression

Why do people act aggressively? In this section, we explore both biological and psychosocial explanations for **aggression** and how aggression can be controlled or reduced.

Aggression Any behavior intended to cause psychological or physical harm to another individual.

Biological Explanations

Because aggression has such a long history and is found in all cultures, some scientists believe that humans are instinctively aggressive (Buss, 2008, 2011; DeWall et al., 2013; Glenn et al., 2011; Mehta et al., 2013). Most social psychologists, however, reject this "instinct" argument, but do accept the fact that biology plays a role. For example, twin studies suggest that some individuals are genetically predisposed to have hostile, irritable temperaments and to engage in aggressive acts (Åslund, 2013; Rhee & Waldman, 2011; Weyandt et al., 2011). Research with brain injuries and other disorders also has identified possible aggression circuits in the brain (Denson, 2011; Hammond & Hall, 2011; Pardini et al., 2011; Wood & Thomas, 2013). In addition, studies have linked the hormone testosterone and lowered levels of some neurotransmitters with aggressive behavior (Ducci et al., 2013; Geniole et al., 2011; Mazur, 2013; Popma et al., 2007; Takahashi et al., 2011).

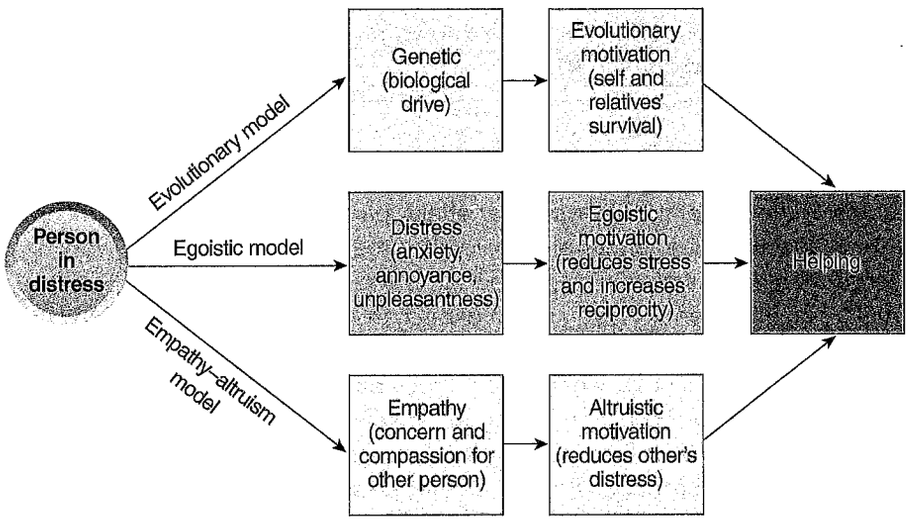
Psychosocial Explanations

Substance abuse (particularly alcohol abuse) is a major factor in many forms of aggression (Levinthal, 2011; Quinn et al., 2013; White et al., 2013). Similarly, aversive stimuli, such as loud noise, heat, pain, bullying, insults, and foul odors, also may increase aggression (Anderson, 2001; Anderson et al., 2008; Barash & Lipton, 2011; DeWall et al., 2013). According to the **frustration–aggression hypothesis**,

Frustration–aggression hypothesis A hypothesis which states that the blocking of a desired goal (frustration) creates anger that may lead to aggression.

FIGURE 14.15 THREE MODELS FOR HELPING

Note how each of these three helping model focuses on a different motivation. Which of the three models for helping shown in this figure do you think provides the best explanation for why someone might give food or money to the man in this photo?



Bruce Ayers/Getty Images

hope for later reciprocation, because it makes us feel virtuous, or because it helps us avoid feeling guilty (Cialdini, 2009; Williams et al., 1998).

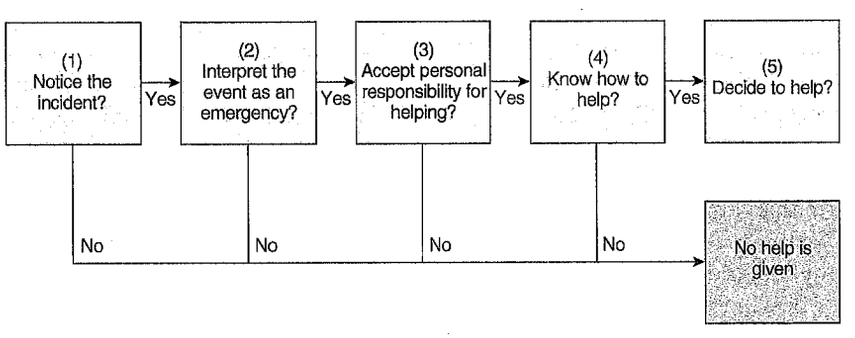
Opposing the evolutionary and egoistic models is the **empathy–altruism hypothesis** (Batson, 1991, 1998, 2006, 2011; Cao, 2013; Edele et al., 2013; Park et al., 2011). This perspective holds that simply seeing or hearing of another person's suffering can create *empathy*—a subjective grasp of that person's feelings or experiences. And when we feel empathic toward another, we are motivated to help that person for his or her own sake. The ability to empathize may even be innate. Research with infants in the first few hours of life shows that they become distressed and cry at the sound of another infant's cries (Hay, 1994; Hoffman, 1993).

Empathy–altruism hypothesis A theory which states that we help because of empathy for someone in need.

Social psychologists have a long history of researching the impact of others on helping behavior (e.g., Fischer et al., 2011). But one of the most compelling and comprehensive explanations for helping or not helping comes from the research of John Darley and Bibb Latané (1970). They found that whether someone helps depends on a series of interconnected events and decisions: The potential helper must notice what is happening, interpret the event as an emergency, accept personal responsibility for helping, decide how to help, and then actually initiate the helping behavior **(Figure 14.16)**.

FIGURE 14.16 WHEN AND WHY DON'T WE HELP?

According to Latané and Darley's five step decision process (1968), if our answer at each step is "yes," we will help others. If our answer is "no" at any point, the helping process ends.



Sam Sarkis/Photodisc/Getty

& Harris, 2012). Cultures also show consistency in what they want in a mate. Women are valued more for looks and youth, whereas men are valued more for maturity, ambitiousness, and financial resources (Bryan et al., 2011; Buss, 1989, 2008, 2011; Chang et al., 2011; Li et al., 2011; Swami, 2011).

Why? Evolutionary psychologists would suggest that men prefer attractive women because youth and good looks generally indicate better health, sound genes, and high fertility. Similarly, women prefer men with maturity and resources because the responsibility of rearing and nurturing children has historically fallen primarily on women's shoulders.

So how do those of us who are not "superstar beautiful" manage to find mates? The good news is that people usually do not hold out for partners who are ideally attractive. Instead, both men and women tend to select partners whose physical attractiveness approximately matches their own (Regan, 1998, 2011; Sprecher & Regan, 2002; Taylor et al., 2011). Also, people use nonverbal flirting behavior to increase their attractiveness and signal interest to a potential romantic partner. Note that in heterosexual couples, the generally accepted norms are for the woman to first signal her interest and for the man to make the first approach (Lott, 2000; Moore, 1998).

Proximity

Attraction also depends on the two people being in the same place at the same time. Thus, *proximity*, or geographic nearness, is another major factor in attraction. One examination of over 300,000 Facebook users found that even though people can have relationships with people throughout the world, the likelihood of a friendship decreases as distance between people increases (Nguyen & Szymanski, 2012). If you're wondering if this is a case of correlation being confused with causation, that's great! You're becoming an educated consumer of research and a good critical thinker.

In fact, there is experimental evidence supporting a causative link between proximity and attraction. For example, oxytocin, a naturally occurring bodily chemical, is known to be a key facilitator of interpersonal attraction and parental attachment (Goodson, 2013; Weisman et al., 2012). In one very interesting experiment, the intranasal administration of oxytocin stimulated men in monogamous relationships, but not single ones, to keep a much greater distance between themselves and an attractive woman during a first encounter (Scheele et al., 2012). The researchers concluded that oxytocin may help maintain monogamous relationships by making men avoid close personal proximity to other women.

Why is proximity so important? It's largely due to the **mere-exposure effect**. Just as familiar people become more physically attractive over time, repeated exposure also increases overall liking (Monin, 2003; Rhodes et al., 2001). This makes sense from an evolutionary point of view. Things we have seen before are less likely to pose a threat than novel stimuli. It also explains why modern advertisers tend to run highly redundant ad campaigns with familiar faces and jingles. In short, repeated exposure increases liking! (See **Figure 14.17**.)

Q5

Mere-exposure effect A developed preference for people or things simply because they are familiar.

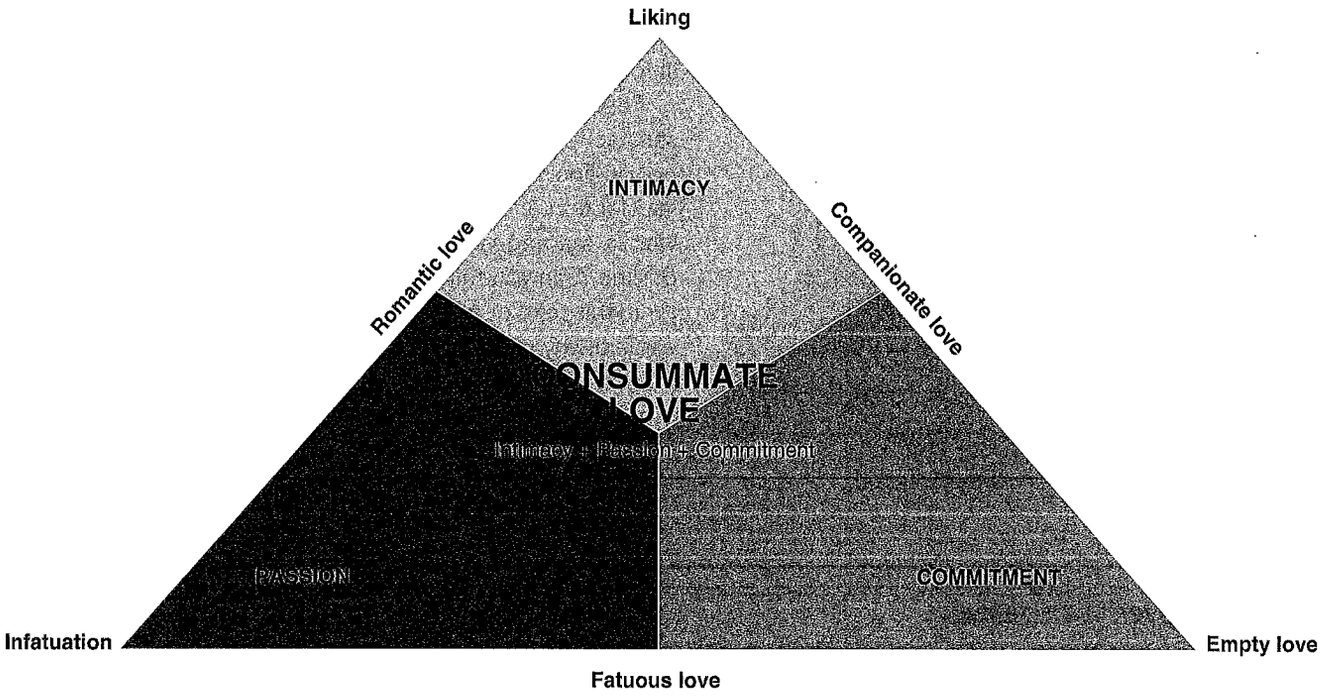
Bernhard Kuhmsted/Retna

FIGURE 14.17 THE FACE IN THE MIRROR

As a result of the mere-exposure effect, we generally prefer a reversed image of ourselves (the one on the left, in this case) because it is the familiar face we're accustomed to seeing in the mirror. However, when presented with reversed and nonreversed photos, close friends prefer the nonreversed images (Mita et al., 1977).

FIGURE 14.18 STERNBERG'S TRIARCHIC THEORY OF LOVE

According to Sternberg, we all experience various forms and stages of love, six of which are seen as being on the outside of the triangle. Only true *consummate love* is inside the triangle because it includes a healthy balance of intimacy, passion, and commitment. The balance among these three components naturally shifts and changes over the course of a relationship, but relationships based on only one or two of these elements are generally less fulfilling and less likely to survive.



For Sternberg, a healthy degree of all three components in both partners characterizes the fullest form of love, **consummate love**. Trouble occurs when one of the partners has a higher or lower need for one or more of the components. For example, if one partner has a much higher need for intimacy and the other partner has a stronger interest in passion, this lack of compatibility can be fatal to the relationship—unless the partners are willing to compromise and strike a mutually satisfying balance (Sternberg, 1988).

Consummate love Sternberg's strongest and most enduring type of love, based on a balanced combination of intimacy, passion, and commitment.

Romantic Love

When you think of romantic love, do you imagine falling in love, a magical experience that puts you on cloud nine? **Romantic love** has intrigued people throughout history. Its intense joys and sorrows also have inspired countless poems, novels, movies, and songs around the world. A cross-cultural study by anthropologists William Jankowiak and Edward Fischer found romantic love in 147 of the 166 societies they studied. They concluded that "romantic love constitutes a human universal or, at the least, a near universal" (1992, p. 154).

Romantic love An intense feeling of attraction to another in an erotic context.

Romantic love may be almost universal, but even in the most devoted couples, the intense attraction and excitement of romantic love generally begin to fade 6 to 30 months after the relationship begins. However, as you can see in **Figure 14.19**, companionate love grows and evolves (Hatfield & Rapson, 1996; Livingston, 1999). Why? Further research explains that **companionate love** is based on deep and lasting trust, caring, tolerance, and friendship, which slowly develops as couples grow and spend more time together. In contrast, romantic love is largely based on mystery and fantasy. People often fall in love with what they want another person to be—and these illusions usually fade with the realities of everyday living (Fletcher & Simpson, 2000; Levine, 2001).

Companionate love Strong and lasting attraction characterized by deep and lasting trust, caring, tolerance, and friendship.

RETRIEVAL PRACTICE: SOCIAL RELATIONS

Self-Test

Completing this self-test and comparing your answers with those in Appendix B provides immediate feedback and helpful practice for exams. Additional interactive, self-tests are available at www.wiley.com/college/huffman.

1. _____ is a learned, generally negative, attitude toward specific people solely because of their membership in an identified group.

a. Discrimination
b. Stereotyping
c. Cognitive biasing
d. Prejudice

2. Research suggests that one of the best ways to decrease prejudice is to encourage _____.

a. cooperation
b. friendly competition
c. reciprocity of liking
d. conformity

3. Onlookers to crimes sometimes fail to respond to cries for help because of the _____ phenomenon.

a. empathy–altruism
b. egoistic model
c. inhumanity of large cities
d. diffusion of responsibility

4. The positive feelings we have toward others is called _____.

a. affective relations
b. interpersonal attraction
c. interpersonal attitudes
d. affective connections

5. A strong and lasting attraction characterized by deep and lasting trust, caring, tolerance, and friendship called _____.

a. companionate love
b. intimate love
c. passionate love
d. all these options

Think Critically

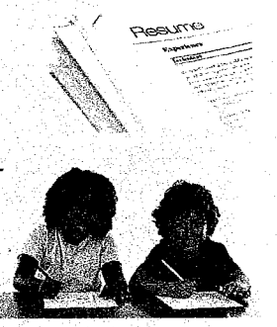
1 Do you believe you are free of prejudice? After reading this chapter, which of the many factors that cause prejudice do you think is most important to change?

2 Which of the three major theories of helping do you find best explains why you tend to help others?

realworldpsychology

Are men still more likely to get hired than equally qualified women?

How does simple nearness (proximity) influence attraction?



HINT: LOOK IN THE MARGIN FOR (Q4) AND (Q5)

Summary

1 SOCIAL COGNITION 399

- **Social psychology** is the study of the way other people influence our thoughts, feelings, and actions. **Social cognition**, the way we think about and interpret ourselves and others, relies on **attributions**, which help us explain behaviors and events. However, these attributions are frequently marred by the **fundamental attribution error (FAE)** and the **self-serving bias**. Both biases may depend in part on cultural factors.
- **Attitudes** have three ABC components: *affective*, *behavioral*, and *cognitive*. An efficient strategy for changing attitudes is to create **cognitive dissonance**. Like the tendency toward attributional biases, our experience of cognitive dissonance may depend on culture.

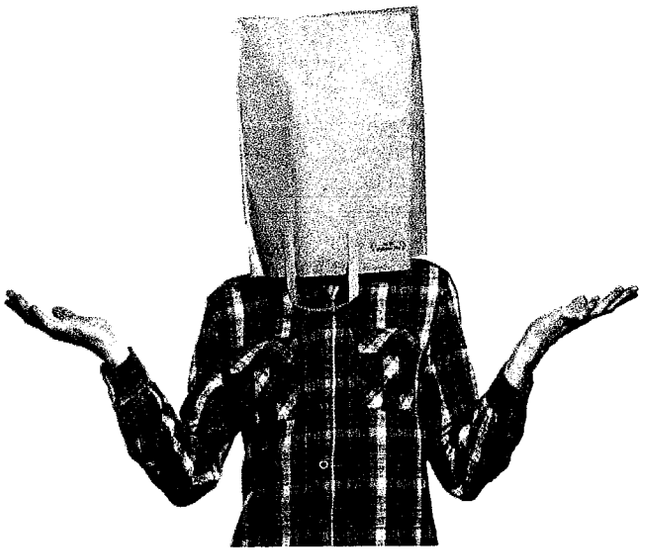
2 SOCIAL INFLUENCE 404

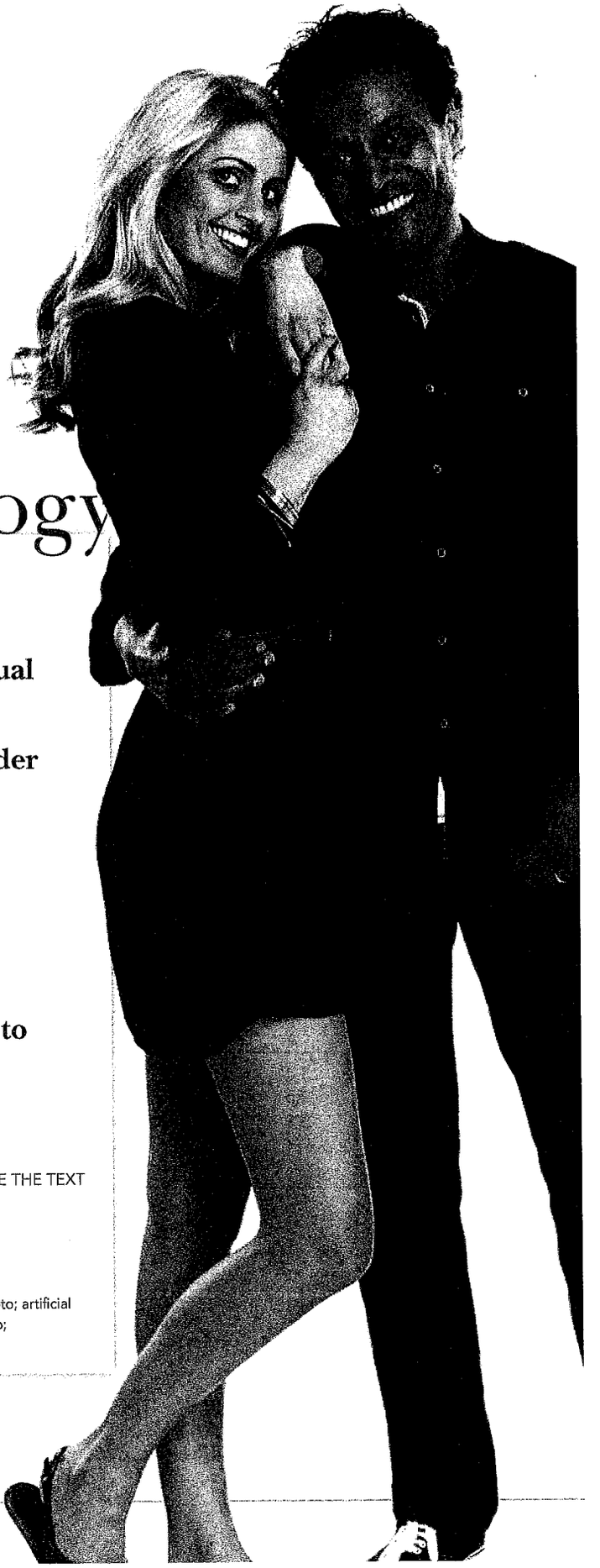
- Three factors drive conformity: *normative social influence*, *informational social influence*, and the role of *reference groups*. **Conformity** means going along with a group, while **obedience** means going along with a direct command, usually from someone in a position of authority. Milgram's research demonstrated the startling power of social situations to create obedience. The degree of deception and discomfort to which Milgram's participants were subjected raises serious ethical questions, and the same study would never be done today.
- The roles we play within groups strongly affect our behavior, as Zimbardo's Stanford Prison experiment showed. Zimbardo's study also demonstrated **deindividuation**. In addition, as we interact with others and discuss our opinions, **group**

Key Terms

RETRIEVAL PRACTICE Write a definition for each term before turning back to the referenced page to check your answer.

- actor–observer effect 400
- aggression 417
- altruism 418
- attitude 401
- attribution 399
- bystander effect 420
- cognitive dissonance 402
- companionate love 423
- conformity 405
- consummate love 423
- deindividuation 410
- discrimination 413
- egoistic model of helping 418
- empathy–altruism hypothesis 419
- evolutionary theory of helping 418
- foot-in-the-door technique 409
- frustration–aggression hypothesis 417
- fundamental attribution error (FAE) 399
- group polarization 410
- groupthink 411
- implicit bias 416
- Informational social influence 406
- ingroup favoritism 415
- interpersonal attraction 420
- mere-exposure effect 421
- normative social influence 405
- obedience 406
- outgroup homogeneity effect 415
- prejudice 413
- reference groups 406
- romantic love 423
- saliency bias 399
- self-serving bias 400
- social cognition 399
- social influence 404
- social psychology 399
- social relations 413
- stereotype 413
- triarchic theory of love 422





realworldpsychology

THINGS YOU'LL LEARN IN CHAPTER 15

Q1 **How do cultures differ in their views on sexual behavior among adolescents?**

Q2 **What are the potential consequences of gender identity confusion?**

Q3 **How can infertility treatment reduce sexual pleasure?**

Q4 **Is "hooking up" more common today than dating?**

Q5 **What forms of conflict are most destructive to relationships?**

THROUGHOUT THE CHAPTER, MARGIN ICONS FOR Q1–Q5 INDICATE WHERE THE TEXT ADDRESSES THESE QUESTIONS.

heart with band aid: © Onur Döngel/iStockphoto; young indian couple: © TerryJ/iStockphoto; artificial insemination: © alex-mit/iStockphoto; man with bag over head: © mattjeacock/iStockphoto; couple: © Dean Mitchell/iStockphoto

shocked the nation. For example, Kinsey reported that 37% of men and 13% of women had engaged in adult same-sex behavior to the point of orgasm. Although Kinsey's interviewing techniques were excellent, his data has been heavily criticized for violating certain ethical and research standards.

In recent years, hundreds of similar surveys and interviews have been conducted on such topics as contraception, abortion, premarital sex, sexual orientation, and sexual behavior (e.g., Buss, 1989, 2007, 2008; Dodge et al., 2013; Laumann et al., 1994; Patrick et al., 2013). By comparing Kinsey's data to the responses found in later surveys, we can see how sexual practices have changed over the years (Goldstein, 2010). For instance, sexual images and portrayals of sex in the media are more prevalent now than they were in the recent past (see *Psych Science*).

PSYCHSCIENCE

MEDIA SEX VERSUS REAL WORLD SEX

Splash News/NewsCom

How have media images and portrayals of sex changed over time? In 1983 only 15% of magazine advertisements included sexual imagery; 20 years later the percentage of magazine advertisements with sexual imagery had nearly doubled, to 27% (Reichert et al., 2012).

Why is this notable? Research shows that sex in the media can influence people's attitudes toward sexual behavior. For example, college students randomly assigned to read articles about sexual relationships later report more positive attitudes toward risky sexual behavior than do those who read general entertainment articles unrelated to sexual behavior (Kim & Ward, 2012).

Research also shows that simply watching sexual content in mainstream movies influences adolescents' sexual behavior up to six years later (O'Hara et al., 2012). In this study, the researchers first examined sexual content, such as heavy kissing or sexual intercourse, in the 684 top-grossing movies from 1998 to 2004. Next, they asked more than 1,000 adolescents, ages 12 to 14, to report which of these movies they had seen. Then six years later the researchers contacted these same adolescents and asked them how old they were when they became sexually active, whether they consistently used condoms during sexual activity, and whether they had multiple sexual partners. Can you predict what they found?

As you might expect based on other research showing the power of observational learning (Chapter 6), adolescents who watched movies with more sexual content started having sex at younger ages, had more sexual partners, and were less likely to practice safer sex. These findings suggest that adolescents learn particular behaviors from watching sexual content in movies and may then model similar behaviors in their later sexual lives.

RESEARCH CHALLENGE

1. Based on the information provided, did this study (O'Hara et al., 2012) use descriptive, correlational, and/or experimental research?
2. If you chose:
   - descriptive research, is this a naturalistic observation, survey/interview, case study, or archival research?
   - correlational research, is this a positive, negative, or zero correlation?
   - experimental research, label the IV, DV, experimental group(s), and control group.

>>CHECK YOUR ANSWERS IN APPENDIX B.

NOTE: The information provided in this study is admittedly limited, but the level of detail is similar to what is presented in most textbooks and public reports of research findings. Answering these questions, and then comparing your answers to those in the Appendix, will help you become a better critical thinker and consumer of scientific research.

Although other cultures' practices may seem unnatural and strange to us, we forget that our own sexual rituals may appear equally curious to others. If the description of the Mangaian practice of superincision bothered you, how do you feel about our own culture's routine circumcision of infant boys?

realworldpsychology **Circumcision and the AAP** At one point, the American Academy of Pediatrics (AAP) decided that the reported medical benefits of circumcision were so statistically small that the procedure should *not* be routinely performed (American Academy of Pediatrics, 1999, 2005). However, in 2013 the AAP reversed itself and now reports that circumcision has potential medical benefits and advantages that outweigh the risks. Despite this reversal, experts are still debating the possible physical and emotional harm to the male infant, as well as to the circumcised adult man.

Israel images/Alamy

RETRIEVAL PRACTICE: STUDYING HUMAN SEXUALITY

Self-Test

Completing this self-test and comparing your answers with those in Appendix B provides immediate feedback and helpful practice for exams. Additional interactive, self-tests are available at www.wiley.com/college/huffman.

1. During the Victorian period, it was believed that _____ led to blindness, impotence, acne, and insanity and that _____ caused brain damage and death.

a. female orgasms; male orgasms
b. masturbation; nocturnal emissions
c. menstruation; menopause
d. oral sex; sodomy

2. _____ was a major pioneer in sex research who used an informal case study method to record his own sexuality.

a. B. F. Skinner
b. Sigmund Freud
c. Alfred Kinsey
d. Havelock Ellis

3. One of the earliest and most extensive surveys of human sexual behavior in the United States was conducted by _____.

a. Havelock Ellis
b. William Masters and Virginia Johnson
c. Emily and John Roper
d. Alfred Kinsey

4. Direct laboratory experimentation and observation of human sexuality were first conducted by_____.

a. Alfred Kinsey
b. William Masters and Virginia Johnson
c. Havelock Ellis
d. All of these individuals

5. Limited exposure to the sexual practices of other cultures may lead to _____, the tendency to view our culture's sexual practices as normal and preferable to those of other groups.

a. sexual prejudice
b. ethnic typing
c. ethnocentrism
d. sexual predation

Think Critically

1. Which of the major sex researchers (Ellis, Kinsey, or Masters and Johnson) do you think contributed the most valuable information to the field of human sexuality? Why?
2. Which of the cross-cultural sexual practices do you find most interesting? Why?

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How do cultures differ in their views on sexual behavior among adolescents?

HINT: LOOK IN THE MARGIN FOR Q1

being either a man or a woman—as well as our **gender roles**—which are learned societal expectations for "appropriate" male and female behaviors and attitudes—are largely formed in the first few years of life.

Gender role A set of learned societal expectations for behaviors and attitudes considered "appropriate" for men and women and expressed publicly by an individual.

How do we come to think of ourselves as male, female, or transgendered, and why do we adhere to certain gender role expectations? These are two of the most controversial questions in the ongoing nature versus nurture debate. Scientists on the nature side suggest that inborn genetic and biological factors not only determine our physical sex but also help program our gender identity and specific gender roles. In contrast, those on the nurture side believe that most aspects of human sexuality are determined largely by social influences.

As you've seen throughout this text, the answer to the debate is almost always provided by the biopsychosocial model, which proposes an interaction between biology, psychology, and social forces. One of the best ways to illustrate the significance of gender identity and the fine nuances of masculine or feminine gender roles is through the famous case study of "John/Joan."

realworldpsychology **The Tragic Tale of "John/Joan"** In 1963, two identical twin boys were taken to their family doctor to be circumcised. Tragically, the first twin's penis was damaged beyond repair. Following the medical experts' advice, the child's testes were removed, his genitalia modified, and estrogen administered so he could be raised as a girl.

During their childhood, the twins were brought to Johns Hopkins Hospital each year for physical and psychological evaluation, and the story of "John/Joan" (the name used by Johns Hopkins) was heralded as proof that gender is made—not born. However, follow-up studies report that despite being raised from infancy as a girl, "Joan" did not feel like a girl and avoided most female activities and interests. As she entered adolescence, her appearance and masculine way of walking led classmates to tease her and call her "cave woman." By age 14, she was so unhappy that she contemplated suicide. Her father tearfully explained what had happened earlier, and for Joan, "All of a sudden everything clicked. For the first time, things made sense and I understood who and what I was" (Thompson, 1997, p. 83).

After the truth came out, "John/Joan" reclaimed his male gender identity and renamed himself David. Following a double mastectomy (removal of both breasts) and construction of an artificial penis, he married a woman and adopted her children. David, his parents, and his twin brother all suffered enormously from the original accident and its long aftermath. Sadly, in 2004, he committed suicide. No one knows what went through David's mind when he decided to end his life. However, he had just separated from his wife, lost his job, and experienced the failure of a big investment. His twin brother had committed suicide shortly before. "Most suicides, experts say, have multiple motives, which come together in a perfect storm of misery" (Colapinto, 2004).

Corbis Images

Understanding Sex and Gender

If you apply the dimensions of sex and gender in Table 15.1 to the case of "John/Joan," you can see why this is such an important case study. Although he was born a chromosomal male, the child's genital sex was altered first by the doctor who accidentally destroyed his penis and later by surgeons who removed his testes and created a "preliminary" vagina. Although experts at the time believed this surgery, along with female hormones and "appropriate" gender-role expectations of the parents, would be enough to create a stable female gender identity, David ultimately rejected this female gender assignment.

Some people are born of one sex but feel strongly that their gender does not agree with their body. This type of *gender dysphoria* is known as **transsexualism**

Transsexualism The state of being born with the biological characteristics of one sex but feeling psychologically as if belonging to the other gender; having a gender identity that does not match one's biological sex.

3. A transsexual is a person who has a _____.

a. mismatch between his or her gender identity and gonads, genitals, or internal accessory organs
b. mismatch between his or her gender role and gonads, genitals, or internal accessory organs
c. heterosexual preference for sexual gratification
d. need to wear clothing of the other sex for sexual gratification

4. John has a male lover but also enjoys sexual relationships with women. His probable sexual orientation is _____.

a. gay
b. transgendered
c. bisexual
d. heterosexual

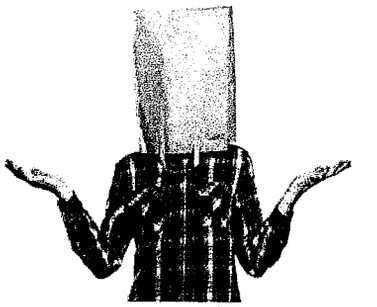
Think Critically

1. Do you believe gender roles are primarily determined by innate, biological factors or that they are learned from society?
2. Why do you think attitudes in Western society have become more accepting of members of the LGBT community in recent years?

realworldpsychology

What are the potential consequences of gender identity confusion?

HINT: LOOK IN THE MARGIN FOR Q2



SEX PROBLEMS

RETRIEVAL PRACTICE While reading the upcoming sections, respond to each Learning Objective in your own words. Then compare your responses with those found at www.wiley.com/college/huffman.

LEARNING OBJECTIVES

1. **DESCRIBE** the paraphilic disorders, including fetishism and exhibitionism, and their treatment.
2. **EXPLAIN** how biological, psychological, and social forces influence sexual dysfunction.
3. **DISCUSS** the major treatments for sexual dysfunctions.
4. **IDENTIFY** the major issues related to STIs and the special problem of AIDS.

When we are functioning well sexually, we tend to take this part of our lives for granted. But what happens when things don't go smoothly? Why are some people sexually aroused by exposure to objects or situations that are potentially self-destructive or that victimize others? Why does normal sexual functioning stop for some people and never begin for others? What are the major diseases that can be spread through sexual behavior? We will explore these questions in the following section.

Paraphilic Disorders

People obviously have differing preferences for particular types of sexual activities. Some may even engage in "kinky" sex involving unusual or socially unacceptable situations or stimuli (Herdt & Polen-Petit, 2014). However, someone who experiences personal distress about having these sexual interests, or whose sexual arousal or response depends entirely on them, may be classified as having a **paraphilic disorder**. Unusual sexual interests or activities between two consenting adults are generally not diagnosed as a paraphilic disorder unless the behaviors are noxious, potentially harmful to self or others, and/or may be classified as criminal offenses. This section examines two of the eight categories—*fetishistic disorder* and *exhibitionistic disorder* (American Psychiatric Association, 2013).

Paraphilic disorder Any of a group of psychosexual disorders characterized by distress about one's sexual interests, including disturbing and repetitive sexual fantasies, urges, or behaviors.

Fetishistic Disorder

In *fetishistic disorder*, the individual uses inanimate objects or parts of the human body to achieve sexual arousal and satisfaction (American Psychiatric Association,

TABLE 15.2 MAJOR MALE AND FEMALE SEXUAL DYSFUNCTIONS

Male		Female		Both Male and Female	
Disorder	**Causes**	**Disorder**	**Causes**	**Disorder**	**Causes**
Erectile disorder* (impotence) *Marked difficulty in obtaining or maintaining an erection during sexual activity or until its completion; marked decrease in erectile rigidity* • Lifelong (present since beginning of sexual activity) or acquired (began after a period of relatively normal sexual functioning) *Must be experienced on almost all or all occasions of sexual activity (approximately 75% to 100%)	**Physical:** Chronic illness, diabetes, circulatory conditions, heart disease, drugs, fatigue, alchohol, hormones, inappropriate or inadequate stimulation **Psychological:** Performance anxiety, difficulty expressing desires, not wanting to have sex, peer pressure, antisexual education or upbringing	**Female orgasmic disorder** (anorgasmia, frigidity) *Marked delay, infrequency, or absence of orgasm; markedly reduced intensity of orgasmic sensations* • Generalized (not limited to certain types of stimulation, situations, or partners) or situational (only occurs with certain types of stimulation, situations or partners)	**Physical:** Chronic illness, diabetes, drugs, fatigue, alchohol, hormones, pelvic disorders, inappropriate or inadequate stimulation **Psychological:** Guilt, fear of discovery, hurried experiences, difficulty expressing desires, severe relationship distress, antisexual education or upbringing	**Inhibited sexual desire** (sexual apathy) *Avoids sexual relations due to disinterest* **Sexual aversion** *Avoids sex due to overwhelming fear or anxiety*	**Physical:** Hormones, drugs, alchohol, chronic illness **Psychological:** Antisexual education or upbringing, depression, anxiety, sexual trauma, relationship problems **Psychological:** Antisexual education or upbringing, sex trauma, partner pressure, gender identity confusion
Premature ejaculation *Persistant or recurrent pattern of ejaculation during partnered sexual activity within approximately one minute following vaginal penetration and before the individual wishes it* • Generalized (not limited to certain types of stimulation, situations, or partners) or situational (only occurs with certain types of stimulation, situations, or partners)	**Primarily psychological:** Gulilt, fear of discovery, hurried experiences, learning to ejaculate as quickly as possible	**Vaginismus** *Involuntary vaginal spasms making penile insertion impossible or difficult and painful*	**Primarily psychological:** Inadequate lubrication, learned association of pain or fear with intercourse, antisexual education or upbringing	**Dyspareunia** *Painful intercourse*	**Primarily physical:** Inadequate lubrication, irritations, infections, genitalia disorders **Psychological:** Antisexual education or upbringing

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Although sex therapists typically divide sexual dysfunction into "male," "female," or "both," problems should never be considered "his" or "hers." Couples are almost always encouraged to work together to find solutions.

For more information, check www.goaskalice.columbia.edu/Cat6.html.

Sources: Adapted from American Psychiatric Association, 2013; Crooks & Baur, 2013; Hyde et al., 2014; King, 2012.

fears can lead to sexual problems? Once again, increased anxiety causes the sympathetic nervous system to dominate, which blocks blood flow to the genitals.

Social Factors

We learn explicit **sexual scripts** from society that teach us *what to do, when, where, how,* and *with whom* (Gagnon, 1990; McCormick, 2010; Ross & Coleman, 2011). For example, during the 1950s, societal messages said the "best" sex was at night, in a darkened room, with a man on top and a woman on the bottom. Today, the messages are bolder and more varied, partly because of media portrayals. Compare, for example, the sexual scripts portrayed in **Figure 15.3**.

Sexual scripts The learned and socially constructed blueprint and guidelines for our sexual interactions.

FIGURE 15.3 CHANGING SEXUAL SCRIPTS

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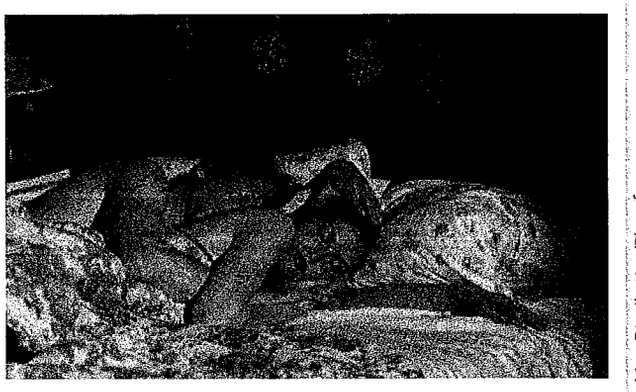
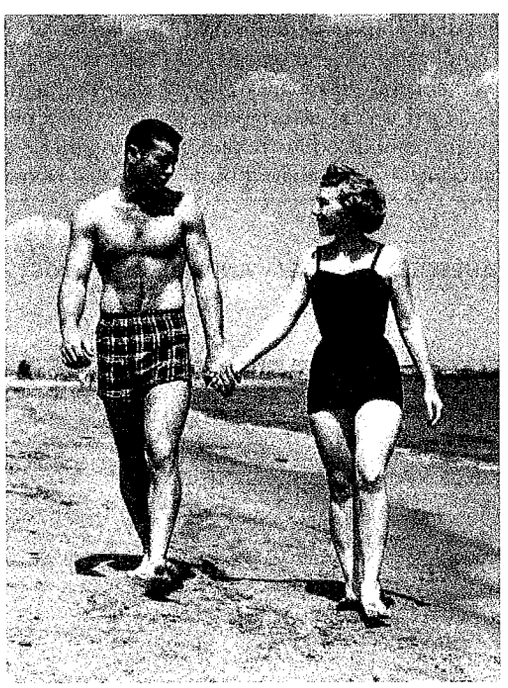
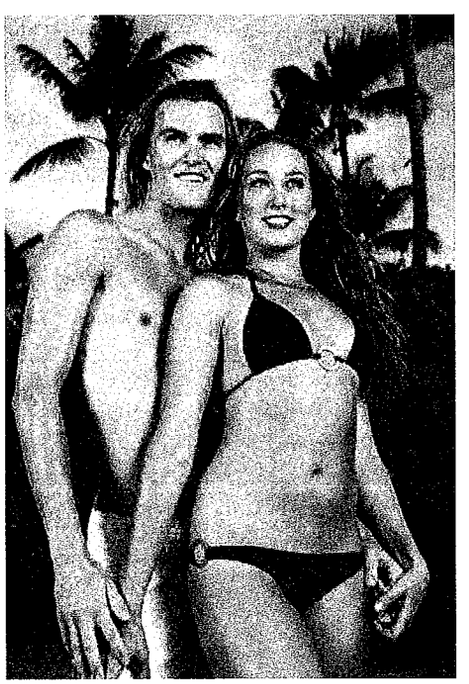


Mars Distribution/Photofest

Ⓐ Television and movies in the 1950s and 1960s allowed only married couples to be shown in a bedroom setting (and only in long pajamas and separate twin-size beds). Contrast this with modern times, where very young, unmarried couples are commonly portrayed in one bed, scantily dressed or nude, and sometimes even engaging in various stages of intercourse.



Stockbyte/Getty Images



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Ⓑ Note the change in body postures and clothing in these beach scenes from the 1960s and today

was *learned.* (See Chapter 13 for a more complete description of both psychoanalysis and behavior therapy.) It wasn't until the early 1970s and the publication of Masters and Johnson's *Human Sexual Inadequacy* that sex therapy gained national recognition. Because the model that Masters and Johnson developed is still popular and used by many sex therapists, we will use it as our example of how psychological sex therapy is conducted.

Masters and Johnson's Sex Therapy Program

Masters and Johnson's approach is founded on four major principles:

1. **Relationship focus** Unlike forms of therapy that focus on the individual, Masters and Johnson's sex therapy focuses on the relationship between two people. To counteract any blaming tendencies, each partner is considered fully involved and affected by sexual problems. Both partners are taught positive communication and conflict resolution skills.
2. **Investigation of both biological and psychosocial factors** Medication and many physical disorders can cause or aggravate sexual dysfunctions. Therefore, Masters and Johnson emphasize the importance of medical histories and exams. They also explore psychosocial factors, such as how the couple first learned about sex and their current attitudes, gender-role training, and sexual scripts.
3. **Emphasis on cognitive factors** Recognizing that many problems result from performance anxiety and *spectatoring*—mentally watching and evaluating responses during sexual activities—therapists discourage couples from setting goals and judging sex in terms of success or failure.
4. **Specific behavioral techniques** Couples are seen in an intensive two-week counseling program. They explore their sexual values and misconceptions and practice specific behavioral exercises. "Homework assignments" usually begin with a *sensate focus* exercise in which the partners take turns gently caressing each other and communicating what is pleasurable. There are no goals or performance demands. Later exercises and assignments are tailored to the couple's particular sex problem.

Diana Walker/Time & Life Pictures/Getty Images, Inc.

Experiments in Sex?
William Masters and Virginia Johnson were the first researchers to use direct laboratory experimentation and observation to study human sexuality.

TIPS FOR HEALTHY SEXUALITY psychology and you

If you would like to improve your own, or your children's, sexual attitudes and sexual functioning, sex therapists would recommend:

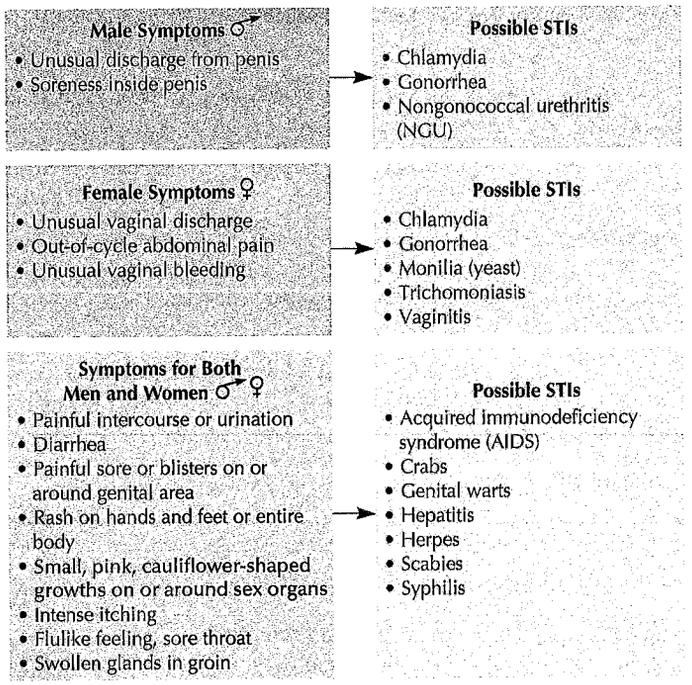
- Beginning sex education as early as possible. Children should be given positive feelings about their bodies and an opportunity to discuss sexuality in an open, honest fashion.
- Avoiding goal- or performance-oriented approaches. Therapists often remind clients that there really is no "right" way to have sex. When couples or individuals attempt to judge or evaluate their sexual lives or to live up to others' expectations, they risk making sex a job rather than a pleasure.
- Communicating openly with your partner. Mind reading belongs onstage, not in the bedroom. Partners need to tell each other what feels good and what doesn't. Sexual problems should be openly discussed without blame, anger, or defensiveness. If the problem does not improve within a reasonable time, consider getting professional help.

Sexually Transmitted Infections (STIs)

Early sex education and open communication between partners are vitally important for full sexual functioning. They also are the key to avoiding and controlling sexually transmitted infections (STIs), formerly called sexually transmitted diseases (STDs), venereal disease (VD), or social diseases. *STI* is the term used to describe the

FIGURE 15.5 COMMON SEXUALLY TRANSMITTED INFECTIONS (STIs)

Note that you may have an STI without having any of the danger signs listed here. If you have symptoms or concerns, see your doctor and follow all medical recommendations. This may include returning for a checkup to make sure you are no longer infected. If you would like more information, check www.niaid.nih.gov/factsheets/stdinfo.htm. For information about STIs, visit www.safesex.org.



Sources: Adapted from Crooks & Baur, 2013; King 2012.

you study this figure, remember that many infected people are *asymptomatic*, meaning they lack obvious symptoms. You can have one or more of the diseases without knowing it. And it is often impossible to tell whether a sexual partner is infectious. That's why the best strategy is prevention (see *Protecting Yourself and Others from STIs*)!

PROTECTING YOURSELF AND OTHERS FROM STIS

psychology and you

The following "safer sex" suggestions are not intended to be moralistic but to help reduce your chances of contracting HIV/AIDS and other STIs:

1. **Remain abstinent or have sex with one mutually faithful, uninfected partner.** Be selective about sexual partners and postpone physical intimacy until laboratory tests verify that you are both free of STIs.
2. **Don't share needles, syringes, or other drug equipment—and don't have sex with someone who does.** If you must share, use bleach to clean and sterilize your needles and syringes. Also, if you're engaging in tattooing and/or body piercing, be sure the needles are sterilized.
3. **Don't have sex if you or your partner is impaired by alcohol or other drugs.** The same is true for your friends: "Friends don't let friends drive (or have sex) when drunk (or drug impaired)."
4. **Use condoms.** Although condoms do not provide 100% protection, when used consistently and correctly, using them is still one of the very best ways to decrease your chances of contracting STIs while also preventing unwanted pregnancies.
5. **Educate yourself.** Learn the signs and symptoms of STIs. If you have more than one sexual partner, experts recommend having regular medical exams (every three to six months), and if you think you might be infected, get help right away.

experience sexual victimization. In this section we examine two types of sexual violence: *child sex abuse* and *rape*.

Child Sexual Abuse

A substantial number of children and adolescents are *sexually abused* by adults or other adolescents. Most experts differentiate between nonrelative **child sexual abuse**, also known as *child molestation* or *pedophilia*, and *incest*, which is sexual contact between two people who are related.

child sexual abuse An unlawful sexual act involving a child that is intended to provide sexual gratification to a parent, caregiver, or other individual, including physical contact and non-contact exploitation.

Child sex abuse can refer to a number of different behaviors, including touching a child's genitals, masturbating in front of a child, engaging in digital penetration, or engaging in oral–genital stimulation, or vaginal or anal intercourse. It also occurs in the absence of any physical contact, such as when an abuser watches a child undress, or exposes genitals to a child. Soliciting a child to engage in acts for the sexual gratification of others or viewing and disseminating child pornography are also considered child sex abuse (American Psychiatric Association, 2013; Seto, 2007, 2013).

realworldpsychology **The Reality of Child Sex Abusers** On October 9, 2012, former Penn State assistant football coach Jerry Sandusky (pictured here in handcuffs) was sentenced to a minimum of 30 years in prison for engaging in sexual assaults against 8 young boys. Sandusky had met these victims through their involvement in a charitable organization he founded to help troubled young boys.

Matt Rourke/AP Photos

Not surprisingly, children who are sexually abused may experience long-term psychological, physical, and behavioral problems. Common reactions include depression, anxiety, guilt, fear, sexual dysfunction, withdrawal, acting out, and problems with sleeping, eating, or school performance. Children also may show inappropriate knowledge of or interest in sexual activity, and they are at increased risk of engaging in unprotected sex and sex with multiple partners when they do become sexually active (Homma et al., 2012; Jones et al., 2013; Watson et al., 2013). In some cases, the effects of child sexual abuse continue into adulthood and lead to depression, anxiety, insomnia, posttraumatic stress disorder (PTSD), problems with alcohol and drugs, aggressive and criminal behaviors, and difficulty in adult sexual relationships. Adults who have been sexually abused as children are 3 times more likely to have a heart attack than others and 10 times more likely to contemplate suicide (Fuller-Thomson et al., 2012; O'Leary & Gold, 2008).

The effects of child sexual abuse vary according to a number of factors, but in general, the longer the abuse occurred, the closer the relationship between the perpetrator and the victim, and the more violent the assault, the greater the negative effects (Easton et al., 2013; Fergusson et al., 2013). The consequences also vary in part depending on whether and how quickly a child reports the abuse. Children who confide shortly after the abuse, and in an adult who believes them, generally experience less trauma than children who do not disclose the offense. Unfortunately, many children wait years to tell someone about what occurred. In fact, one study found that half of all victims wait as long as five years before telling someone else, and 25% never told anyone (Hebert et al., 2009).

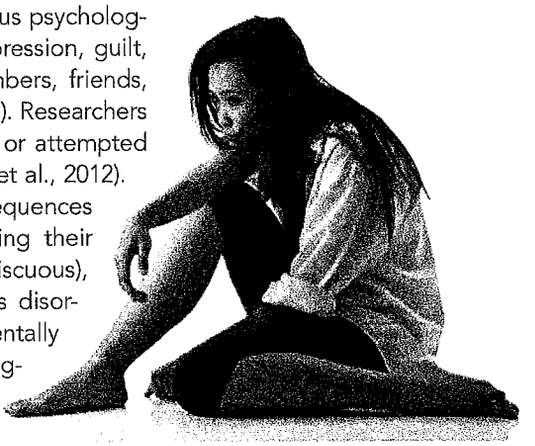
How can we prevent child sexual abuse? The following general tips are drawn from the work of numerous specialists. For more information, contact the National Children's Alliance (www.nca-online.org) or the National Child Abuse hotline 1-800-4-A-Child.

1. **Education** Adults should learn the risks and facts about child sexual abuse (such as the fact that the greatest risk is not from strangers but from family members and friends). Starting in early childhood, present this information in concrete terms, using age-appropriate language to both male and female

The impact of rape is often long lasting and can include physical, psychological, and social consequences. Victims may experience chronic pain, headaches and migraines, back pain, and gynecological and gastrointestinal problems. Contrary to recent statements by some politicians and policy makers, women may become pregnant or develop sexually transmitted infections as a result of sexual assault. (Hart-Johnson & Green, 2012; Hyde et al., 2014; Watson et al., 2012).

realworldpsychology Long-Term Consequences of Sexual Violence

In addition to the physical consequences of rape, equally serious psychological and social consequences include lasting fear, anxiety, depression, guilt, distrust of others, and strained relationships with family members, friends, and romantic partners (Crooks & Baur, 2013; Watson et al., 2012). Researchers in one study surveyed 140 women who had experienced rape or attempted sexual assault about the lasting impact of this event (Perilloux et al., 2012). These women reported experiencing significant negative consequences related to their psychological and social functioning, including their self-esteem, social reputation (such as being labeled promiscuous), and sexual desire. Some victims develop posttraumatic stress disorder (PTSD) and experience painful flashbacks, in which they mentally re-experience the trauma of the attack. Some respond by engaging in unhealthy behaviors, including taking drugs, smoking cigarettes, vomiting, overeating, and even attempting suicide.



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Recovering from sexual violence takes time. Victims of rape and other forms of sexual assault may go through an initial period of coping with the immediate physical and emotional trauma, followed by a lengthy "reorganization" phase in which they try to get back to their normal life. They often benefit from group therapy with other survivors (Chivers-Wilson, 2006). When PTSD has developed, cognitive therapy or treatment with antidepressants may also be useful (Regehr et al., 2013; Vickerman & Margolin, 2009).

Preventing rape is obviously a crucial goal, and the best general strategies are to:

- Provide education about healthy sexuality and safe dating relationships.
- Help parents identify violent attitudes and behaviors in their children.
- Create and enforce policies in school and work environments that address sexual violence and harassment.
- Develop mass media messages—on television, online, on the radio, and in newspapers and magazines—that promote violence-free relationships and norms.
- Increase bystanders' awareness of sexual violence and the importance of stepping in to prevent an assault.

For more information, contact the Rape, Abuse & Incest National Network (www.rainn.org) or the National Sexual Violence Against Women Prevention Research Center (www.musc.edu/vawprevention).

Sexual Communication

Communication is essential to all parts of our lives. As you've just seen, it plays a key role in reducing and eliminating sexual victimization. It's also particularly important in finding and maintaining a healthy sexual relationship. We need to learn how to clearly communicate not only with words but also nonverbally, through facial expressions, eye contact, and body language. In this section, we focus on three key topics and potential problems with communication: male/female differences, managing conflict, and saying "no."

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as controlling behavior. To make matters worse, at home that night, in a one-on-one conversation, the same man may feel like relaxing. If he doesn't have information to convey or anyone to defend against, he sees little reason to talk. In comparison, the woman may have spent her day having few opportunities to build closeness through language, and she looks forward to a quiet dinner and "relationship talk" with her mate.

Obviously, this scenario of male and female conversational styles exaggerates gender differences and overlooks individual situations. But we use this extreme example to demonstrate why the two sexes are sometimes at cross-purposes when they talk. Researcher Deborah Tannen (1990, 2007, 2011) believes that boys and girls learn different styles of communication from early childhood and that these styles sometimes carry over into most of their adult social interactions. In her book *You Just Don't Understand*, Tannen (1990) says that the most important first steps in improving communication between men and women are accepting that there are some differences in gender communication styles, realizing it is not a matter of one style being right or wrong, and then working to understand the other gender's occasionally differing styles.

Following the publication of Tannen's research, a large number of investigations have looked at gender differences in communication. These studies have verified that some differences do exist, but they are relatively small (Carothers & Reis, 2013; Leaper & Robnett, 2011; Speer & Stokoe, 2011). Moreover, they may reflect differences in status and power more than gender (e.g., Brannon, 2005; Eckert & McConnell-Ginet, 2013). This is good news. Given that good communication is essential for healthy sexuality, as well as in our professional and personal lives, men and women should be able to engage in clear, accurate "one-culture" communication with a little effort.

Managing Conflict

One of the most important, and most difficult, areas of communication is conflict management. Married couples have an average of two to three disagreements per month (McGonagle et al., 1992), and adolescents report having one to two conflicts per day—usually with a friend, sibling, or parent (Jensen-Campbell & Graziano, 2000). Although conflict is a part of all close relationships, people handle relationship conflicts in very different ways. The way we do so is a major predictor of relationship satisfaction and longevity.

Carol Rusbult and her colleagues describe four major types of responses that people typically use in handling conflict (Drigotas et al., 1995; Rusbult & Zembrodt, 1983; Rusbult et al., 1982). As you can see in *How Do You Handle Conflict?* on the next page, one constructive strategy is *voice*, which means talking things over to try

King & DeLongis, 2013; Verhofstadt et al., 2005). The other partner then attempts to end this discussion—or avoid the issue—by maintaining silence or withdrawing from the situation. In a heterosexual relationship, the man is more likely to withdraw from conflict and the woman is more likely to take a leading role in initiating and discussing it. This gender difference is due in part to socialization pressures that lead women to have higher expectations for closeness in a relationship than do men. Other researchers explain it by noting the typical power imbalance in marriage, in which men tend to receive more benefits than women—and therefore have less interest in making changes. In short, avoiding communication and withdrawing from conflict leads to relationship dissatisfaction and couples need to learn better strategies (Bodenmann et al., 1998; Carroll et al., 2013; Honeycutt et al., 1993; Määttä & Uusiautti, 2013; Weger & Metts, 2005).

Some couples just avoid and deny the presence of any conflict in a relationship. However, denial prevents couples from solving their problems at early stages, which can lead to even greater problems later on. Not surprisingly, expressing anger and disagreement leads to lower marital satisfaction at first (Gottman & Krokoff, 1989; Gottman & Silver, 2012). In fact, couples who show high levels of negative communication in their first few years of marriage are more likely than others to get divorced (Lavner & Bradbury, 2012). This finding suggests that working through conflicts in a positive and productive way is an important predictor of marital satisfaction and longevity.

psychology and you **Conflict Resolution Skills** What can we do to successfully manage conflict in our own relationships? Understanding the other person's point of view and putting ourselves in their place is a good first step. People who can adopt their partner's perspective show more constructive responses to conflict.

Second, because conflict and disagreements are an inevitable part of close relationships, people need to be able to forgive personal wrongdoings and apologize (Ebesu Hubbard et al., 2013; Fincham, 2000; McCullough et al., 1997, 1998). Those who trust their partners remember relationship transgressions their partner committed in a more positive and less severe light, which in turn increases relationship satisfaction (Luchies et al., 2013). Similarly, apologies minimize conflict, lead to forgiveness, and help you maintain relationship closeness. In line with this view, spouses who are more forgiving show higher marital quality over time (Paleari et al., 2005).

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Saying "No"

When faced with sexual or other types of conflict, how do you respond? Are you *passive*, *aggressive*, or *assertive*? In this section, we'll clarify the differences between these terms, help you identify your own level of assertiveness, and provide suggestions for increasing your assertiveness, which in turn will improve your conflict resolution skills.

Let's begin with *passive behavior*, which means failing to stand up for your rights even when you are fully justified in doing so. Although passive individuals often "get along" with everyone, they are less respected and less likely to achieve their personal goals. They also are self-denying and self-inhibiting, experience low self-esteem, and feel hurt and anxious (Alberti & Emmons, 2008; Vavrichek, 2012). In addition, passive sex partners may be seen as lackluster and as contributing little to the relationship.

As you may recall from Chapter 14, *aggression* is any behavior intended to harm another. During conflict, an aggressive person will stand up for his or her rights,

RETRIEVAL PRACTICE: SEX AND MODERN LIFE

Self-Test

Completing this self-test and comparing your answers with those in Appendix B provides immediate feedback and helpful practice for exams. Additional interactive, self-tests are available at www.wiley.com/college/huffman.

1. Good suggestions for counseling parents and other caregivers about avoiding child sexual abuse include _____.

a. presenting sexual information to both male and female children in concrete terms and using age-appropriate language
b. teaching a child the difference between "okay" and "not okay" touches
c. recognizing that abusers are most often family members, friends, or trusted people in positions of authority
d. all these options

2. Which of the following is a myth about rape?

a. A man cannot be raped by a woman
b. All women secretly want to be raped
c. Women cannot be raped against their will
d. All these options

3. Research has shown that _____ are more likely to use speech to convey information, exert control, preserve independence, and enhance their status, whereas _____ tend to use speech to achieve and share intimacy, promote closeness, and maintain relationships.

a. older men; younger men
b. older women; younger women
c. men; women
d. heterosexuals; women and men

4. According to John Gottman's research, _____ means emotionally withdrawing and refusing to participate in conversation.

a. defensiveness
b. contempt
c. stonewalling
d. neglect

Think Critically

1. Do you think male/female differences in communication are a significant contributor to sexual and relationship problems between the sexes? Why or why not?
2. How can you use the tips on managing conflict and learning to say "no" to improve your own relationships?

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What forms of conflict are most destructive to relationships?

HINT: LOOK IN THE MARGIN FOR Q5

Summary

1 STUDYING HUMAN SEXUALITY 430

- Although sex has always been an important part of human interest, motivation, and behavior, it received little scientific attention before the twentieth century. Havelock Ellis was among the first to study human sexuality despite the repression and secrecy of nineteenth-century Victorian times. Alfred Kinsey and his colleagues were the first to conduct large-scale, systematic surveys and interviews of the sexual practices and preferences of U.S. adults during the 1940s and 1950s. In the 1960s, the research team William Masters and Virginia Johnson pioneered the use of actual laboratory measurement and observation of human physiological response during sexual activity.
- Cross-cultural studies provide important information about the similarities and variations in human sexuality. They also help counteract *ethnocentrism*—the tendency to judge our culture as "normal" and preferable to others.

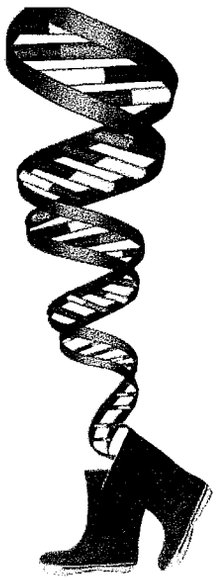
2 SEXUAL IDENTITY 434

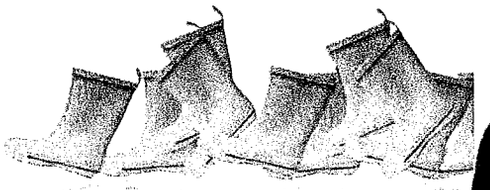
- **Sex** refers to biological differences between men and women, such as having a penis or vagina, or to physical activities such as masturbation and intercourse. **Gender** encompasses the socially constructed differences between men and women, such as "Men should be aggressive" and "Women should be nurturing."

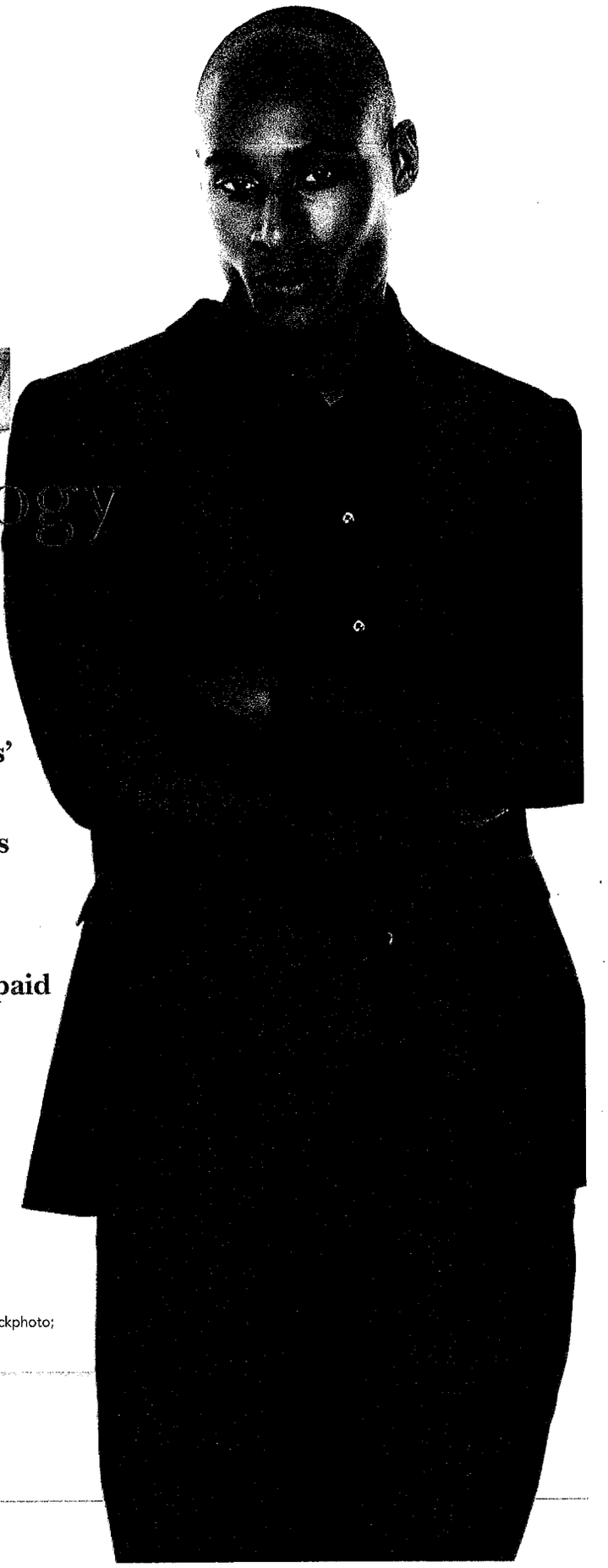
Key Terms

RETRIEVAL PRACTICE Write a definition for each term before turning back to the referenced page to check your answer.

- AIDS (acquired immunodeficiency syndrome) 444
- assertiveness 454
- child sexual abuse 447
- cross-dressing 436
- gender 434
- gender identity 434
- gender role 435
- HIV positive 444
- paraphilic disorder 437
- performance anxiety 440
- rape 448
- sex 434
- sexual dysfunction 438
- sexual orientation 436
- sexual scripts 441
- transgendered 434
- transsexualism 435







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THINGS YOU'LL LEARN IN CHAPTER 16

- **Q1** Why does patient satisfaction increase when doctors are being observed?
- **Q2** Can Facebook posts influence job applicants' success?
- **Q3** How does an arrogant boss affect employees and the workplace?
- **Q4** Do genes help determine leadership ability?
- **Q5** How does knowing what our coworkers get paid affect our own job satisfaction?

THROUGHOUT THE CHAPTER, MARGIN ICONS FOR Q1–Q5 INDICATE WHERE THE TEXT ADDRESSES THESE QUESTIONS.

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TEST YOURSELF: WHAT DO YOU KNOW ABOUT I/O PSYCHOLOGY?

psychology and you

TRUE OR FALSE?

____1. One of the first calls for workplace psychology came from military officials during World War I, who asked psychologists to classify and place soldiers in jobs that matched their specific abilities.

____2. Employees will improve or change their productivity when they know they are being observed.

____3. Every organization has a unique and generally unwritten corporate culture that largely determines job success.

____4. "Sticking to your guns" may be the single most important quality of successful leaders.

____5. Famous people are used in ads primarily for their expertise—or "expert power."

Answers: Two of these are false. While reading the chapter, try to identify them.

The Evolution of I/O Psychology

The formal study of psychology is relatively new, spanning a mere 136 years or so. The study of I/O psychology is even shorter, originating with the work of Walter Dill Scott, Frederick W. Taylor, and Hugo Munsterberg at the beginning of the twentieth century.

On December 20, 1901, Walter Dill Scott, a psychology professor at Northwestern University, addressed a group of advertising professionals. In his talk, he proposed an interesting idea—using psychological principles in the field of advertising. Scott believed that, instead of merely exhibiting a product and hoping customers would realize their need for it, advertisers could aggressively influence customers by suggesting that they buy it or by arguing and debating the undeniable merits of the purchase. In other words, they could use *persuasion* and *argumentation* to sell.

Harley Schwadron/CartoonStock

Scott also proposed several other ideas, radical at the time but taken for granted today. He suggested imitating other companies' successful products, advertising, and production policies; encouraging competition among companies producing similar goods; building loyalty between producers and suppliers; and creating specialized products for markets (Landy & Conte, 2013; Lantos, 2011).

Frederick W. Taylor, the next major figure in I/O psychology, pointed out the value of designing the work situation to increase worker output. He correctly surmised that if workers performed their jobs more efficiently, the company would increase profits, and workers' wages would go up.

A story is often told of Taylor's attempt to increase the efficiency of workers who shoveled heavy pig iron. Each man moved an average of 12.5 tons of pig iron per day, which, to most of us, sounds like a lot. But by allowing the men to rest at scientifically determined periods and designing new shovels to better match the material being moved, Taylor increased each man's output to 47 tons per day! In addition to increased efficiency, his methods also led to less fatigue and increased wages for the worker and increased profit for the company. AlthoughTaylor was an engineer, and not a psychologist. he is nevertheless considered one of the founders of *human factors psychology*—an important subfield of I/O psychology (Aamodt, 2013; Weisbord, 2011).

Hugo Munsterberg was another early psychologist interested in applying psychology to the workplace, especially in the area of employee selection and training. His best-known research was a study of streetcar operators, for which he created a

factors psychology as machines in the workplace became more complicated.

For example, I/O psychology contributed to the operational safety of airplanes through the design of better control panels. At the beginning of the war, many planes and crew were lost because the controls for the landing gear and wing flap were similarly shaped, and pilots preparing for landing often confused the two. Consequently, the planes' wheels were up or the wing flaps were in the wrong position, causing insufficient lift and deadly crashes! The I/O solution to this problem was simple **(Figure 16.2)**.

Another event that helped shape I/O psychology in the United States was the civil rights movement of the late 1950s and early 1960s, which culminated in the Civil Rights Act of 1964. Among other things, the act mandated the creation of employment tests, training programs, and recruitment programs that were fair to all job applicants, regardless of ethnicity, religion, or gender.

Screening tests for job applicants also had to be valid predictors of job performance. For example, general IQ tests could no longer be used to screen applicants at the telephone company for the job of directory assistance operator. Instead, the company might administer a spelling and reading comprehension test.

In addition, the Civil Rights Act of 1964 also forced a radical change in corporate recruitment and hiring policies. This change opened many previously unobtainable jobs to ethnic minority and women job applicants. Hence, I/O psychology was now important not only to corporate management but also to the federal government.

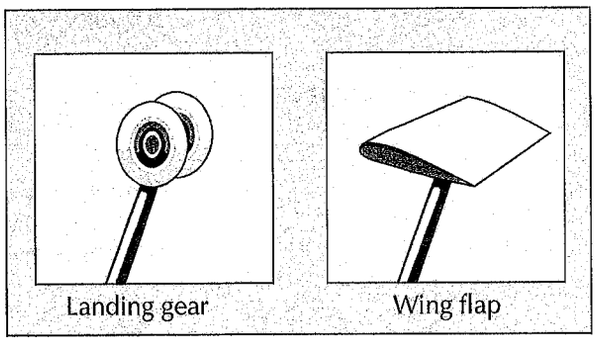

FIGURE 16.2 I/O PSYCHOLOGY AND WORLD WAR II

Can you see how redesigning controls to look and feel like the functions they perform almost completely eliminated pilot-controlled landing errors? Updated variations on these World War II design changes are still in use on contemporary aircraft.

RETRIEVAL PRACTICE: INTRODUCING I/O PSYCHOLOGY

Self-Test

Completing this self-test and comparing your answers with those in Appendix B provides immediate feedback and helpful practice for exams. Additional interactive, self-tests are available at www.wiley.com/college/huffman.

1. Hui-Ching, a consultant hired by a large law firm to study worker motivation and job satisfaction, is most likely a part of which branch of I/O psychology?

a. consulting
b. organizational
c. industrial
d. all of these options

2. Fill in the names of the founders of I/O psychology (Scott, Taylor, or Munsterberg) next to their major contributions:

a. ____ pioneered methods that led to improved employee selection and training.
b. ____ developed principles companies could use to increase worker efficiency and company profit.
c. ____ applied psychological principles to advertising.

3. ____ occurs when research participants change their behaviors because they know they are being observed.

a. The halo effect
b. Observational bias
c. The Hawthorne effect
d. Spectator bias

4. The ____ mandated the creation of employment procedures that are fair to all job applicants.

a. Yerkes Placement Policy of 2010
b. Taylor Management Bill of 2001
c. Civil Rights Act of 1964
d. Roe v. Wade decision of 1980

Think Critically

1. Which of the three founding figures (Scott, Taylor, or Munsterberg) do you think made the most significant contribution to I/O psychology? Why?
2. How might the Hawthorne effect be both productive and counterproductive in the workplace and in your everyday life?
3. Would you like a career as an I/O psychologist? Why or why not?

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Why does patient satisfaction increase when doctors are being observed?

HINT: LOOK IN THE MARGIN FOR Q1

Once recruitment is complete, the next step is to select the most qualified person. Employers often narrow the field of candidates through applications, questionnaires, interviews, observations, standardized psychological tests, knowledge and skills tests, performance tests, and *biodata* (detailed biographical information).

Unfortunately for job applicants and business owners, who may lack sufficient staff to do the hiring, the number of unemployed persons per open position rose dramatically after the most recent recession (December 2007–June 2009), but the ratio has somewhat recovered in recent times **(Figure 16.4)**.

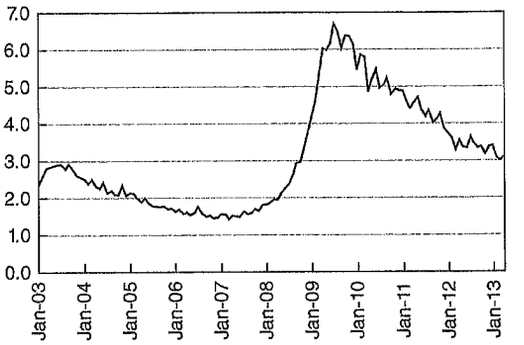


FIGURE 16.4 JOB SEEKERS VERSUS JOB OPENINGS

Note that when the most recent recession began (December 2007), the ratio of unemployed people per job opening was 1.8. When the recession officially ended (June 2009), the ratio was 6.2, and in January 2013, the ratio was 3.0.

Source: Bureau of Labor Statistics, U.S. Department of Labor (2013, April).

Although employers generally use a wide variety of selection devices, the interview continues to be the most popular method—and carries the most weight (Dipboye & Johnson, 2013; Huffcutt & Culbertson, 2011). Structured interviews rely on a set of preplanned questions asked of every person interviewed and a standardized rating of each applicant's qualifications. This reduces several biases associated with unstructured interviews, which tend to be casual, short, and made up of random questions. As you might expect, the information from structured interviews is generally a better predictor of job performance than that from unstructured interviews (Bellis, 2008; Blackburn, 2006; Bonness, 2008; Huffcutt, 2011; Kleinmann et al., 2011).

Recognizing the importance of interviewing well, most applicants tend to be anxious, and that is perfectly normal. When you're in this position, it's also helpful to focus on the positive aspects of interviews. First, they allow for longer and more detailed answers than application forms, and most people find it easier to talk than to write. In addition, both parties have the opportunity to ask questions and to clarify exactly what the job requires. In effect, you are interviewing the company as much as it is interviewing you. For specific tips on interviewing skills, see the feature below.

TIPS FOR A GREAT INTERVIEW

psychology and you

Whether structured or unstructured , most interviews involve a face-to-face meeting with one or more interviewers who are using the meeting as an alternative to or in addition to the application form. Their questions are designed to measure your attitudes ("Did you like your last job?" "Do you prefer working in groups or alone?"), job experiences ("What did you do in your last job?"), and personal background ("What was your college major?"). Interviewers also use this face-to-face meeting to assess your communication and interpersonal skills. Successful applicants are typically friendly (but not overly so), eager (but not desperate), and **assertive** (but not aggressive). Here are additional, more specific tips:

Assertiveness The act of confidently and directly standing up for your rights, or putting forward your views, without infringing on the rights or views of others; striking a balance between passivity and aggression.

1. **Research** Before your interview, research the company, manager, and supervisors, as well as the knowledge, skills, abilities, and other personal characteristics (KSAOs) required for the advertised position. The information you gather can be invaluable in helping you respond to interview questions, and in deciding how much you want to work for this particular company. Also, knowing things like the history and size of the company will show the interviewer that you are serious about your job search.

2. **Role playing** Ask someone to help you practice playing both interviewer and interviewee, which provides perspective on both roles. Encourage honest feedback about your verbal and nonverbal habits that may affect your interview. For example, do you nervously jiggle your feet or avoid eye contact? Also, brainstorm ahead of time about potential interview questions and then practice giving your best responses.

3. **Personality** Interviewers generally like friendly, eager, and assertive applicants. These are basic personality traits you've undoubtedly displayed before—when meeting new friends, for example. Recognizing that you've used these skills in the past may help you relax in the interview and be yourself.

4. **Body language** Use the "head, shoulders, knees, and toes" technique:

Once an employee has been on the job for a time, his or her performance is typically formally assessed with a **performance evaluation** (the last step in **Figure 16.5**). Evaluations serve a number of purposes. One of the most important is providing feedback to the employee on how the organization views his or her performance. Employees need to know when they are doing well so they can keep on doing well, and they need to know when they are not doing well so they can improve. Research shows that employees fare better when their work is evaluated, when reinforcers of behavior are closely related to their job performance, and when criticism is delivered constructively (Bouskila-Yam & Kluger, 2011; Brown & Warren, 2011; DeNisi & Sonesh, 2011).

Performance evaluation The formal procedure used to assess employee job performance.

Performance evaluations also are useful for identifying training and development needs. Does the employee need to upgrade skills or to be retrained? In addition, management often uses performance evaluations to guide decisions about promotions, transfers, and termination.

A performance evaluation can be *objective* or *subjective*. Objective measures include such things as the dollar value of sales a salesperson has closed or the number of publications a college instructor has achieved. Many jobs, however, like management and support services, do not have an easily identifiable and objective product. And in some cases, objective measures may not be appropriate. For example, how do you identify the *product* of a college instructor's teaching? The effect of one college instructor on any one student's learning is difficult to measure objectively. Furthermore, benefits from a college instructor or a college degree are sometimes not apparent until a future time.

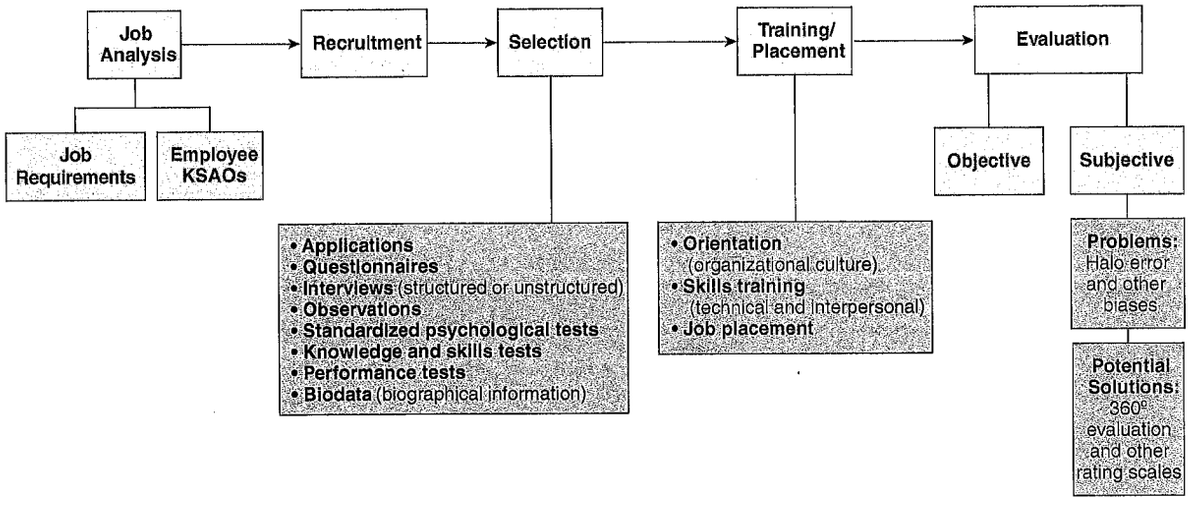
Subjective measures avoid some of these problems (but introduce others, as you will shortly see). Subjective ratings by supervisors or others who are familiar with an employee's job performance are the most common form of performance evaluation. For example, college instructors are frequently evaluated by students in their classes or peers in their department.

Despite their popularity, subjective methods suffer from serious rater biases and other human errors. One of the most widely researched problems is the **halo error**, the tendency to rate individuals too high or too low in all areas based on their rating on one outstanding trait (Keeley et al., 2013; Spector, 2011). If a supervisor values friendliness, he or she may overrate an employee who smiles a lot. A further problem involves differentiating between a *legitimate* halo—when an employee *does* perform well on all dimensions—and bias caused by the undue influence of one characteristic.

Halo error The tendency to rate individuals either too high or too low based on one outstanding trait.

FIGURE 16.5 THE WORK OF INDUSTRIAL PSYCHOLOGISTS

Note how industrial psychologists influence personnel decisions in a step-by-step fashion—from hiring to firing.



in the work world can be similarly tough or lenient raters. In addition, research shows that supervisors do, in fact, give higher ratings to employees they like or have evaluated before (Breuer et al., 2013; DeNisi & Sonesh, 2011). On a similar note, can you see how students and employees might also give higher ratings to teachers and employers they like?

Interestingly, rating your boss on arrogance may be particularly useful. Why? A recent study found that arrogant bosses blame employees for problems, leading to higher employee turnover and overall dysfunction in the workplace (Silverman et al., 2012). *Test Yourself* provides a rating scale recently designed specifically to measure arrogance in the workplace.

Q3

TEST YOURSELF: DO YOU HAVE AN ARROGANT BOSS?

psychology and you

Think about your boss and say whether you agree or disagree with each of the following statements. Does your boss:

- Put his or her personal agenda ahead of the organization's agenda?
- Demonstrate different behaviors with subordinates and with managers?
- Discredit others' ideas during meetings and make them look bad?
- Reject constructive feedback?
- Exaggerate his or her superiority and make others feel inferior?

Scoring: If you had more "agree" than "disagree" responses, research suggests that you may indeed have an arrogant boss (Silverman et al., 2012).

RETRIEVAL PRACTICE: MANAGEMENT PERSPECTIVE

Self-Test

Completing this self-test and comparing your answers with those in Appendix B provides immediate feedback and helpful practice for exams. Additional interactive, self-tests are available at www.wiley.com/college/huffman.

1. Recruitment generally begins with a ____.

a. job announcement
b. structured interview
c. job analysis
d. performance evaluation

2. ____ continue to be the most common method of employee selection.

a. Previous job histories
b. Interviews
c. Letters of recommendation
d. None of these options

3. If an employer used the number of cases won by a lawyer as part of his or her performance evaluation, this would be an example of ____.

a. the halo error
b. an objective measure
c. a 360-degree multisource measure
d. a subjective measure

4. To offset problems with the halo error, organizations may use ____.

a. special rating scales
b. structured interviews
c. 360-degree multisource measures
d. all but one of the above

Think Critically

1. Would you prefer a structured or unstructured interview? Why?
2. How might a college professor fall victim to the halo error?

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Can Facebook posts influence job applicants' success?

How does an arrogant boss affect employees and the workplace?

HINT: LOOK IN THE MARGIN FOR Q2 AND Q3

written job descriptions and responsibilities assigned to each position in the organizational structure.

We will first discuss three major leadership perspectives: *trait*, *situational*, and *functional*. We will then explore the various forms of power that leaders exert. While reading, write down specific examples for each of these leadership styles and forms of power from your own life. This will not only help you master this material, but it will also maximize your own leadership potential and appropriate use of power.

Trait Perspective

What causes one individual to emerge as a leader and not another? The **great-person theory** argues that leaders are born, not made. This theory suggests that Abraham Lincoln, Julius Caesar, Catherine the Great, and Mahatma Gandhi inherited certain personality traits, such as extroversion and charisma, and would have emerged as great leaders regardless of the time, location, or circumstances of their birth.

Great-person theory A theory that leadership results from specific, inherited personality traits.

The great-person theory has a long history—and a number of important supporters. For example, recent advances in genetic testing provide research support for this approach. Data from two large twin studies, which included information about participants' jobs, relationships, and DNA samples, revealed that people with particular genes are more likely to assume leadership positions at work (De Neve et al., 2013).

Q4

Trait theorists have identified several additional traits that may be linked to the great-person theory of leadership (Derue et al., 2011; Hogg, 2013; Kirkpatrick & Locke, 1996; Reichard et al., 2011):

- **Drive** Desire for achievement, combined with high levels of energy, perseverance, and initiative.
- **Honesty and integrity** Ability to engender trust in others.
- **Self-confidence** Belief in their own abilities to succeed.
- **Expertise** Exceptional knowledge and skills.
- **Creativity** Ability to arrive at innovative and imaginative solutions.
- **Cognitive ability** Intelligence necessary to interpret and integrate large bodies of information.
- **Leadership motivation** Desire to exercise influence over others in order to achieve shared goals.
- **Flexibility** Ability to recognize the actions or approaches required in a given situation and act accordingly.

Of these eight traits, flexibility may be the single most important quality of successful leaders (Zaccaro et al., 1991). Ironically, many voters and politicians tend to prefer leaders who "stick to their guns."

In addition, recent findings suggest that the *Big Five* dimensions of personality we discussed in Chapter 11 may play an important role in leadership (Emery et al., 2013; Riggio & Mumford, 2011). As you may recall, these five traits are identified using the acronym OCEAN: *O* for openness to experience, *C* for conscientiousness, *E* for extroversion, *A* for agreeableness, and *N* for neuroticism. Can you see how these traits might be related to leadership? Being imaginative and adventurous (Openness), dependable and hardworking (Conscientiousness), outgoing and active (Extroversion), trusting and good-natured (Agreeableness), and calm and even-tempered (*non*-Neuroticism) are all related to becoming an effective leader.

© Lucas Jackson/Reuters/Corbis

realworldpsychology **Personality Traits and Career Outcomes** The Big Five model has been successful in predicting career outcomes in a variety of ways. For example, previous research has shown that personality traits such as being conscientious, open to experience, and outgoing are positively related to better job performance, whereas neurotic traits like poor impulse control are negatively related to job performance (O'Boyle et al., 2012).

According to the situational approach, Hitler's rise to power resulted from an interaction of his personal style with the uniquely chaotic social and economic situation that prevailed in Germany after World War I. It is believed that in a more stable, wealthier, and happier Germany, Hitler would never have attracted the following he gathered in the 1930s. In another time and place, he might have spent his life as an unknown house painter rather than becoming a powerful political leader who murdered millions of people.

Autocratic, Democratic, and Laissez-Faire Leaders

From the situational perspective, three major styles of leaders rise to the top during different times in history and according to the needs of the group.

1. **Autocratic (authoritarian) leaders** tend to emerge, and work best, during times of crisis, such as a war or natural disaster. Such leaders take a top-down approach to leadership—making all the major decisions, assigning tasks to members of the group, and demanding full obedience. Can you see how in times of crisis, autocratic leaders may be successful because of their tight command and decisive actions? In other situations, however, they may be criticized for their dictatorial approach and the creation of intergroup hostility.

   As you can see, autocratic leadership allows for rapid decision making and can be useful in a crisis, or in working with truly unmotivated, unskilled workers. However, it is limited by the quality and competence of the leader. Even the best leaders can't think of everything. Furthermore, because autocrats rarely solicit, or listen to, feedback or suggestions from subordinates, autocratic leadership limits the pool of available ideas. Under this type of leadership, intelligent, skilled, career-oriented workers often become frustrated and demoralized. They cannot grow and gain leadership experience in an "I'm not paying you to think" autocratic environment. Like executives in the Enron scandal, autocratic leaders also can use their power for immoral or illegal acts.

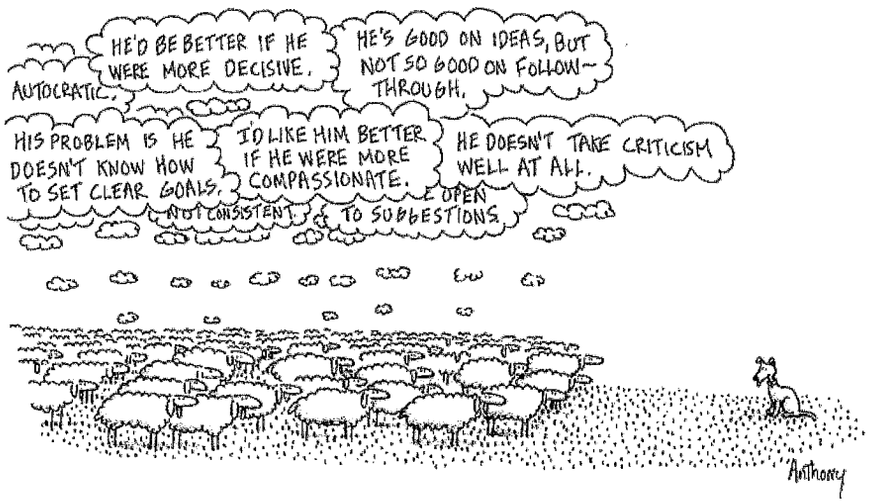
Autocratic (authoritarian) leader A leader whose leadership style generally emerges during times of crisis; such a leader makes all major decisions, assigns tasks to members of the group, and demands full obedience.

2. In sharp contrast, **democratic (participative) leaders** emerge, and are most successful, in peaceful, prosperous times. These leaders encourage group discussion and decision making through consensus building (Arnold & Loughlin, 2013; DuBrin, 2001). Democratic leaders are praised for their supportive behaviors. But they also may be blamed for indecisiveness in times of crisis.

   Douglas McGregor (1960) identified two types of managers with very different assumptions about human nature. *Theory X* managers believe employees dislike work, require close supervision, and need extrinsic rewards for motivation. *Theory Y* managers, in contrast, believe employees like work, need little supervision, and have their own intrinsic motives for work. Studies have shown that under Theory Y managers, workers are given a greater voice in the way their

Democratic (participative) leader A leader whose leadership style is to encourage group discussion and decision making through consensus.

Can you label the multiple types of leadership supposedly being shown by this dog?



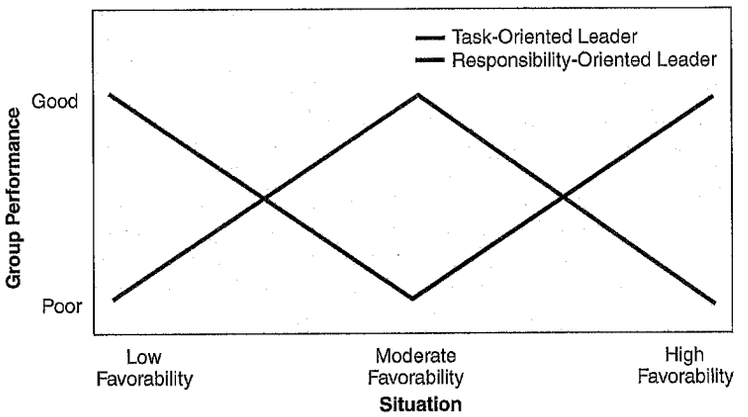


FIGURE 16.9 FUNCTIONALIST APPROACH TO LEADERSHIP

Notice in this figure how groups perform best with task-oriented leaders when the situation is either unfavorable or highly favorable. In contrast, when the situation is only moderately favorable, relationship leaders are more effective. Can you explain why?

Fred Fiedler (1969) has found that the behaviors of task-oriented leader are most successful and effective when the situation is either unfavorable or highly favorable **(Figure 16.9)**. When people are happy and everything is running smoothly, focusing on the task will get the most accomplished. This is also true when people are very unhappy and the situation is out of control. In this case, the task leader takes charge, imposes order, and gets the work done.

In sharp contrast, a relationship-oriented leader is most valued and effective under conditions of moderate favorability. When workers are only fairly happy, the group needs a leader who pays attention to morale and hurt feelings rather than the task. Fiedler's theory has been successfully tested on numerous groups, including college administrators, postmasters, and business managers (Jenkins, 2011; Lin et al., 2011; Livi et al., 2008; Weiner, 2005).

realworldpsychology **Gender Differences in Leadership** Think about your own family and the two styles of leadership we just discussed—task oriented and relationship oriented. Which style was most like your mother's and your father's? If your family was like most others, your mother probably focused on the family's feelings and needs (the *relationship-oriented leader*), whereas your father was likely to be more concerned with keeping things running smoothly and getting the job done (the *task-oriented leader*).

How prevalent is this division of styles? Are women generally the relationship leaders and men the task leaders? Or is this just a stereotype? To find out, researchers have examined hundreds of studies and found small yet significant gender differences (Arnold & Loughlin, 2013; Day & Antonakis, 2012; Eagly et al., 1995; Klonsky, 2013). Overall, it appears that male leaders do tend to be more task oriented, whereas females exhibit more of the interpersonal traits typical of relationship-oriented leaders.

However, let's note a few qualifiers found by other researchers. For example, Jan Grant's (1988) and Bernard Bass's (1990) reviews of the literature found no significant differences between the management styles of male and female managers. Furthermore, the few differences that were identified dwindled as the level of management increased. Respondents with positive past experiences with female managers tend to rate women higher on management characteristics (Duehr & Bono, 2006).

Perhaps the most important caution to keep in mind is that within-group differences in management style among men and women are substantially greater than between-group differences. This means that although there do seem to be some small male–female differences in leadership style, there is more variation in leadership style within a group of all women or within a group of all men than between the two groups.

low-level supervisor. Reward power can be very effective, but if it is used inappropriately or too often, it may be perceived as bribery and lose its effectiveness.

5. **Coercive power** resides in the ability to use punishment, or the threat of it, for failure to comply with desired behavior. Disciplinary actions, low performance evaluations, fines, salary reductions, suspension, and firing are all forms of coercive power. As you may recall from Chapter 6, coercive power and punishment can be effective short-term measures to stop unacceptable behavior, but their overuse usually leads to resentment, reduced morale, counterproductive employee behaviors, revenge, and increased employee turnover.

Coercive power Authority based on the ability to use or threaten punishment.

In sum, each of these five bases is hard to measure, but they can be used productively or nonproductively, depending on the leader and the situation (Hanf et al., 2013; Randolph & Kemery, 201). Power itself is not bad. The key is to know when and where each type is appropriate—and most likely to be effective.

Worker Motivation

Why do some workers put in long hours even when they are not being directly compensated? Why do others arrive late, do the minimum, and leave early if the boss isn't looking? You may have some answers after having read about personality differences and motivation and reinforcement in earlier chapters of this book (Chapters 11, 10, and 6). In this section, we will explore three theories I/O psychologists have developed about what motivates workers: *goal-setting*, *equity*, and *expectancy* **(Figure 16.10)**.

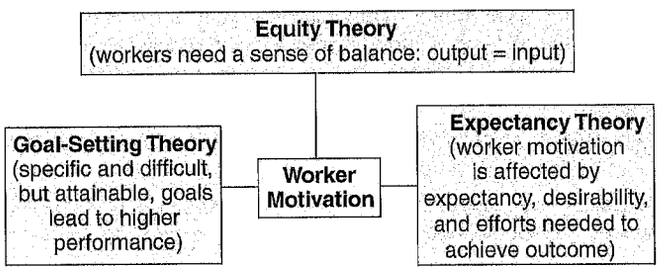


FIGURE 16.10 WHAT MOTIVATES WORKERS?
I/O psychology has identified at least three major theories to explain why workers do what they do and what motivates optimal job performance.

Goal Setting

Like other college professors, we've noticed that the students most likely to succeed are not necessarily the ones with the highest intelligence. Instead, the highest achievers generally have challenging, specific, and well-defined goals for what they want out of their college education, compared to students with less focused, general goals, such as "to get a degree."

Researchers have supported what we've observed. According to **goal-setting theory** (Lee & Wei, 2011; Locke & Latham, 2002, 2006, 2013; Schmidt et al., 2013), setting *specific* and *difficult* but attainable goals leads to higher performance. A *goal* is defined as whatever a person consciously wants to obtain or achieve. Locke and Henne (1986) have identified four ways goals affect people's behavior: They focus attention and action on goal-related behaviors, motivate people to try harder, increase persistence, and encourage individuals to search for effective strategies to attain their goals.

Goal-setting theory The theory that setting specific and difficult, but attainable, goals leads to higher performance.

Goal-setting theory has been widely studied, and it is currently the most popular theory of motivation in industrial/organizational psychology (Spector, 2011; Zedeck, 2011). However, researchers also have noted several drawbacks. For example, workers sometimes focus so much on their goals that they ignore other equally important job requirements. And goals occasionally conflict, so working on one prevents working on another.

Equity

In contrast to goal-setting theory, **equity theory** suggests that we are strongly motivated to maintain a sense of equilibrium or balance in our dealings with others and with organizations. At work, we prefer jobs in which the output is equal to the input. If

Equity theory A cognitive theory of work motivation which proposes that workers are motivated by a need for a sense of balance between output and input.

Before deciding to work hard (or not to work hard), individuals reportedly ask themselves three questions:

1. **What can I reasonably expect from my efforts?** If employees perceive that rewards such as salary increases, bonuses, and promotions are based on hard work, they will work hard. If they believe rewards are based on factors such as seniority or politics, both motivation and morale will be extremely low.

   In line with this, employees tend to exert more effort when a company institutes a bonus program—in which more effort leads directly to more rewards—than when it institutes a penalty system—in which lack of success leads to pay reduction or demotions (Christ et al., 2012).

2. **Do I really want the rewards offered by management?** If you've been working hard and hoping for a salary increase, but are offered a promotion with increased responsibility and only a small bonus, you will obviously be disappointed. Similarly, if you have put in long hours, hoping for a transfer to the West Coast office, but instead get offered the East Coast, you will be very discouraged. Managers should recognize that individual workers have different ideas about what is rewarding.

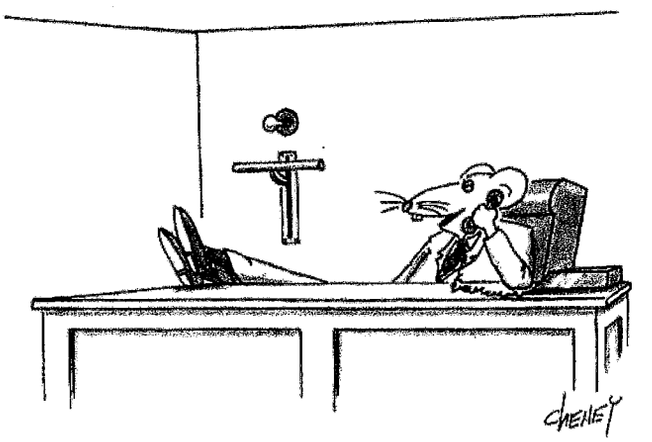
3. **If I give maximum effort, will it be reflected in my job evaluation?** For some employees, the answer is too often no. If you lack the training or necessary skill level for a particular job, you are unlikely to be a high performer, no matter how hard you try. On the other hand, some workers are qualified, but their supervisors may be unfair or may not like them. Regardless of their efforts, these external situations may block them from getting a good evaluation.

In sum, knowing about the three major worker motivation theories (*goal-setting*, *equity*, and *expectancy*) and acting on your knowledge can help improve your own job performance and your management of others.

Worker Motivation

Which of the three worker motivational theories best explains the apparent happiness of this rat?

Answer: Equity theory because the rat apparently feels satisfied with the balance of work output and input.



"Oh, not bad. The light comes on, I press the bar, they write me a check. How about you?"

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WHAT MOTIVATES WORKERS? realworldpsychology

If you're a manager interested in increasing worker motivation, here are three ways you (and your employees) can benefit from expectancy theory:

- **Clarify the route to rewards**. Promotions, salary increases, and bonuses should be based on clear, definable measures of performance. Be sure to communicate these measures to your employees and provide frequent feedback on their efforts.
- **Personalize payoffs**. Ensure that the rewards you've chosen for good performance are meaningful or valued by your employees. Ask employees to help design payoffs that fit their personal goals and expectations.
- **Reward maximum effort**. Provide frequent evaluation of employees' performance, including feedback on how their current and *maximum* performance level will affect their long-term job promotions and raises.

Job Satisfaction

What is the worst job you have ever had? What made it so bad? Was it the working conditions or low pay? Or the work itself? Maybe you just hated sitting at a desk for eight hours. Job satisfaction research is a high priority for I/O psychologists. In this section, we examine why managers should be concerned about employee job satisfaction and what factors determine worker satisfaction (personality/job factors).

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Steve Jobs and Job Fit Theory
In 2005, Apple CEO Steve Jobs gave a commencement address emphasizing that "the only way to do great work is to love what you do." Can you see how this suggestion directly reflects the research on personality–job fit theory?

fit between personality and occupation ensures success on the job and a higher level of job satisfaction because people tend to like what they are good at.

Studies generally support Holland's theory (Hansen, 2013; Kristof-Brown & Billsberry, 2013; Park et al., 2011; Tak, 2011). For example, in one study, 269 employees working in 25 different companies rated their own personality traits, and their supervisors rated their performance on 35 different job skills (Johnson et al., 2011). Can you predict the findings? Employees who self-reported higher levels of honesty and humility—meaning showing fairness, sincerity, and modesty and avoiding greed—were rated significantly higher by their supervisors on actual job performance.

Another meta-analysis study found that employees whose interests matched the skills and tasks required in their jobs showed better performance and stayed with the company longer. You may be interested to know that college students whose interests matched their chosen major got higher grades and were less likely to drop out (Nye et al., 2012). These findings point to the importance of finding a job—and college major—that fits with your interests, skills, and abilities!

Organizational Communication

Communication is vital for our individual survival and for our national and international business success. In this section, we examine first the basic elements of communication, then nonverbal communication, and finally specific ways to improve your communication skills.

Nature of Communication

Communication is an interdependent process of sending, receiving, and understanding messages (Dunn & Goodnight, 2014; Knapp & Daly, 2011). It includes conversations between individuals, public speeches, small-group discussions, e-mail and text messages, interoffice memos, knowing glances between friends or lovers, and so on.

Communication The interdependent process of sending, receiving, and understanding messages.

Throughout most of human history, communication has meant face-to-face "talk." However, the invention of writing allowed people to communicate with those who were far away, and the development of the printing press greatly multiplied the power of long-distance communication. Today, technology such as the Internet allows a form and speed of communication unimaginable a generation ago.

Keeping up with technological change and finding ways to stay connected with customers can thus be critical to an organization's survival. Yet many U.S. businesses have encountered significant problems in their online efforts to communicate with their employees and customers. Another challenge is that Internet access is still unevenly distributed around the globe **(Figure 16.12)**.

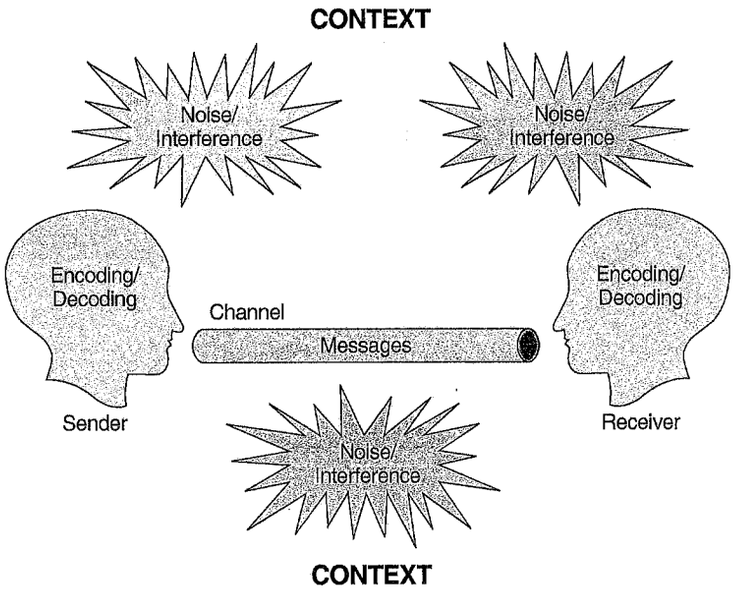

FIGURE 16.13 COMMUNICATION PROCESS

Interpersonal communication generally includes at least eight important elements: sender, receiver, message, encoding, decoding, channels, noise, and context. In most two-way conversations, the sender and receiver simultaneously send and receive messages (both verbal and nonverbal).

1. and **2. Sender and receiver** Communication begins with a *sender*, who initiates the message, and a *receiver*, the person to whom the message is targeted. In an organizational setting, the employer may be the sender of a one-way interoffice memo reminding receivers of production goals or upcoming events. But in a typical two-way conversation, both people simultaneously serve as both sender and receiver.
3. **Message** The *message* refers to ideas, information, or meaning sent back and forth between the sender and receiver. These messages can be *personal* ("I'm unhappy with your contributions to this project") and/or *impersonal* ("I'm unhappy with the budget for this project").
4. **Encoding** *Encoding* is putting thoughts, ideas, or feelings into meaningful symbols that another person can understand, such as giving your supervisor a verbal or written summary of your ideas for improving working conditions.
5. **Decoding** *Decoding* is translating or interpreting the meaning of the message. An example might be when your supervisor interprets your message as a valid suggestion and asks for more detail.
6. **Channels** The *channel* is the means by which the message is communicated. We have numerous communication channels, including the *sensory channel* through which the message reaches the receiver (we see the speaker, hear her voice, possibly feel her physical touch, and so on), as well as various *environmental channels* (letters, reports, e-mails, phone calls, texts, public speeches, television, newspapers, and so on).

   In a typical work setting, the channels of information also generally flow in three different directions—*downward*, *upward*, and *laterally* **(Figure 16.14)**. In addition, there are two types of organizational channels: *formal* and *informal*. Formal channels are established by the organization and follow the organizational structure, or chain of command. Informal channels consist of casual conversations, personal notes, and e-mails exchanged by workers.
7. **Noise** When we attempt to communicate, intentional and unintentional stimuli often interfere. Such interference is called *noise*, and it consists of *internal noise* (physical and psychological factors in the receiver, such as poor vision or hearing, bad mood, or distracting daydreams about the coming weekend), as well as *external noise* (environmental factors, such as loud construction noise or visual blocks between the speaker and receiver).

meeting, traditional Japanese men bow, Arab men kiss, and U.S. men shake hands or hug.

Social class also affects nonverbal communication. For example, higher-status individuals generally do more touching than lower-status people. Presidents touch vice presidents and employers touch employees, not the other way around.

realworldpsychology **Cultural Differences in Gestures** Gestures vary a great deal from one culture to the next. Making the "ring" gesture (forming a circle with your thumb and index finger) is common in North America to indicate "Everything is good" or "Okay." Unfortunately, if we made this same signal in Tunisia, we'd be saying, "I'll kill you!" In Japan, the gesture is a symbol for a coin, and it means you're asking for money or commenting on the cost of something. And in southern Italy, it refers to a body part that is not mentioned in polite company (or in college textbooks). Similarly, if you're a fan of the University of Texas sports teams and use the "hook 'em horns" sign (the index and pinky fingers are raised up, while the middle two are folded down), you should realize that the same sign in Italy means, "Your spouse is unfaithful!"

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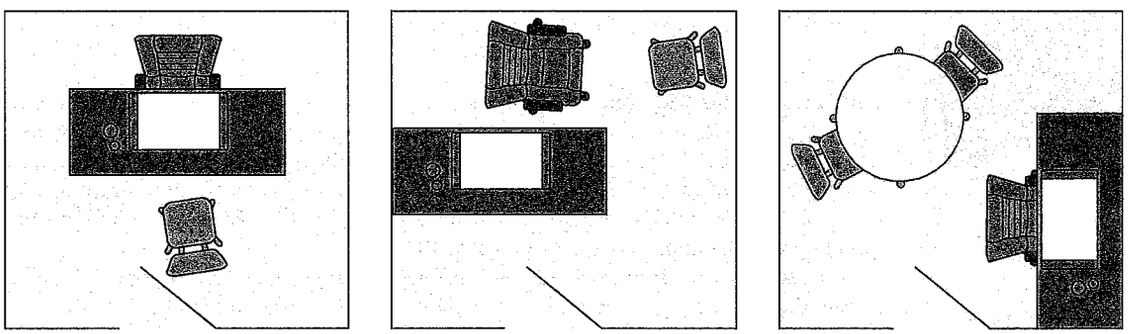
How can we prevent miscommunications with people from other cultures? To avoid offending others and increase our chance of social and business success in other countries, we need to study both the verbal and nonverbal languages of the countries we visit (Jackob et al., 2010; Xu, 2011).

Proxemics: Physical and Personal Space **Proxemics**, the second channel of nonverbal communication, refers to our use of physical and personal space. Study the *physical space* of the three different office arrangements in **Figure 16.15**. Can you see how the arrangement of the boss's chair in relationship to the visitor's chair communicates three radically different messages?

Proxemics The form of nonverbal communication involving physical and personal space.

FIGURE 16.15 IF ROOMS COULD TALK

Note how the various furniture arrangements communicate three different nonverbal messages. Compare this arrangement to your office, dorm room, or home. What are you saying to visitors through your choice of furniture placement? (Adapted from Schermerhorn et al., 2010)



"I am the boss." (a)

"I am the boss, but let's talk." (b)

"Forget I'm the boss. Let's talk." (c)

Adapted from John R. Schermerhorn, James G. Hunt, Richard H. Osborn, Mary Uhl-Bien, *Organizational Behavior*,11e, Figure 11.2, p. 259. Copyright © 2010 by John Wiley & Sons, Inc. This material is reproduced with permission of John Wiley & Sons, Inc.

someone "That was really smart!" as a compliment requires different inflections and tone than saying, "That was really smart!" as a sarcastic comment. The words are the same, but the meanings are opposite. Only the paralanguage allows us to know which is which.

TEST YOUR PARALANGUAGE psychology and you

Paralanguage is a powerful form of communication. You can improve your skills by experimenting with the volume of your speech (loud or soft), the pitch of your voice (high or low), and the speed at which you speak. Try communicating five major emotions—sarcasm, anger, fear, surprise, and joy—while saying the following words: "I'm not leaving."

Now try the same experiment with a classmate, coworker, or close friend and take turns saying the words. Be sure you each close your eyes or turn your back while the other person is speaking and try to guess what emotion he or she is expressing. You may be surprised how well this simple exercise improves your nonverbal communication skills.

Improving Communication

Specific communication strategies and skills help improve communication. Here are a few.

Audience Analysis This may be the most important key to effective communication. Picture this: A 2-year-old is pulling and tugging on her mother's clothes as the mother is intently speaking on the phone, a harried professor is rushing to finish making a point as students are packing up to leave the class, and a troubled employee is explaining to an angry, unreceptive boss why the very expensive new computer system is a total failure. Each of these three people is doing his or her best to communicate. But without audience cooperation, their efforts are meaningless. For effective communication, the audience must be "ready, willing, and able" to listen. In addition, the communicator must pay attention to topics we've discussed earlier (the sender and receiver, channel, noise, and context), making sure to optimize these for the current audience.

Active and Empathic Listening *Active listening* requires paying complete attention to what another is saying. It means listening for underlying meanings and key elements of the sender's message and recognizing both the verbal and the nonverbal message. It also requires asking direct questions about the message itself rather than passively and unquestioningly absorbing information. Simple questions like "Does this make sense?" or "Is there another point of view on this issue?" can greatly improve your understanding of the sender's message.

In addition to using active listening, which helps identify the underlying feelings or emotional content of the message, we also need to understand the situation from the other person's point of view. This type of *empathic listening* requires focusing on the other person, being nonjudgmental, and responding sensitively to the sender's verbal and nonverbal communication (Bodie et al., 2013; Knapp & Daly, 2011; Young & Cates, 2010).

For example, suppose someone tells you about a series of personal problems and you respond by saying, "It sounds as if you feel overwhelmed because so many things have gone wrong lately. What's it like for you to be struggling with so much?" This response combines empathy with the questioning and full attention of active listening, and it opens the door to a deeper discussion of the person's situation.

Feedback We obviously need to know whether the recipient received and understood our intended message. Asking, "Is this clear?" "Do you need an example or

RETRIEVAL PRACTICE: WORKER PERSPECTIVE

Self-Test

Completing this self-test and comparing your answers with those in Appendix B provides immediate feedback and helpful practice for exams. Additional interactive, self-tests are available at www.wiley.com/college/huffman.

1. ____ theory is *not* one of the three major perspectives that explain leadership?

a. Charismatic
b. Trait
c. Situational
d. Functional

2. George is the supervisor of a large software company who believes in hiring the right people and then generally leaving them alone to do their job. George's style of leadership is called ____.

a. democratic
b. autocratic
c. relationship oriented
d. laissez-faire

3. Identify the motivation theory that best applies in the following situations:

a. ____ Seong enjoys assignments that are difficult but attainable.

b. ____ Denise avoids work and responsibility but does not fear being fired because she is best friends with the boss and enjoys high seniority.

c. ____ Juan feels he is being underpaid, so he decides to cut back on his hours at work.

4. The ____ suggests that a match between a person's personality and occupation is a major factor in job satisfaction.

a. expectancy theory
b. halo effect
c. participative decision-making theory
d. personality–job fit theory

5. Kristen frowns at her teacher during class and sits with her arms tightly crossed. What element of nonverbal communication is she using?

a. paralanguage
b. proxemics
c. sensory channels
d. kinesics

Think Critically

1. Which type of leader do you think you would most prefer to work for—autocratic, democratic, or laissez-faire?
2. Which form of power do you think is most effective in most situations? Why?
3. What new information or tip about communication in this chapter did you find most helpful? Why?

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Do genes help determine leadership ability?

How does knowing what our coworkers get paid affect our own job satisfaction?

HINT: LOOK IN THE MARGIN FOR Q4 AND Q5

Summary

1 INTRODUCING I/O PSYCHOLOGY 460

- **Industrial/organizational (I/O) psychology** is concerned with the development and application of scientific principles to the workplace.
- Walter Dill Scott, Frederick W. Taylor, and Hugo Munsterberg were the three major figures in early I/O psychology. Scott proposed using psychological principles in advertising, Taylor emphasized designs and principles in the work situation that would increase worker output, and Munsterberg was most influential in the area of employee selection and training.
- The labor power needs of World War I gave the I/O field respectability. Based on newly developed IQ tests, Walter Dill Scott developed a program to place recruits in jobs that suited their abilities. An important I/O research finding during this period was the **Hawthorne effect**, which occurs when people change their behavior because of the novelty of a research situation or because they know they are being observed.
- World War II led to scientifically designed worker-training programs to improve productivity for the war effort. The Civil Rights Act of 1964 required I/O psychology to create employment tests, training programs, and recruitment programs that are fair to all job applicants, regardless of ethnicity, religion, or gender.

Key Terms

RETRIEVAL PRACTICE Write a definition for each term before turning back to the referenced page to check your answer.

- assertiveness 465
- autocratic (authoritarian) leader 473
- coercive power 477
- communication 481
- democratic (participative) leader 473
- equity theory 477
- expectancy theory 478
- expert power 476
- goal-setting theory 477
- great-person theory 471
- halo error 467
- hawthorne effect 462
- industrial/organizational (I/O) psychology 460
- job analysis 464
- kinesics 484
- laissez-faire leader 474
- leadership 470
- legitimate power 476
- nonverbal communication 484
- organizational citizenship behavior (OCB) 480
- organizational culture 466
- organizational psychology 470
- paralanguage 486
- performance evaluation 467
- personality–job fit theory 480
- proxemics 485
- referent power 476
- relationship-oriented leader 474
- reward power 476
- task-oriented leader 474

Appendix A

STATISTICS AND PSYCHOLOGY

We are constantly bombarded by numbers: "On sale for 30 percent off," "70 percent chance of rain," "9 out of 10 doctors recommend," "Your scores on the SAT were in the 75th percentile." Business and advertisers use numbers to convince us to buy their products. College admission officers use SAT percentile scores to help them decide who to admit to their programs. And, as you've seen throughout this text, psychologists use numbers to support or refute psychological theories and demonstrate that certain behaviors are indeed results of specific causal factors.

When we use numbers in these ways, we're all using statistics. **Statistics** is a branch of applied mathematics that uses numbers to describe and analyze information on a subject.

Statistics The branch of applied mathematics that deals with the collection, calculation, analysis, interpretation, and presentation of numerical facts or data.

If you're considering a major in psychology, you may be surprised to learn that a full course in statistics is generally required for this major. Why? Statistics make it possible for psychologists to quantify the information we obtain in our studies. We can then critically analyze and evaluate this information. Statistical analysis is imperative for researchers to describe, predict, or explain behavior. For instance, Albert Bandura (1973) proposed that watching violence on television causes aggressive behavior in children. In carefully controlled experiments, he gathered numerical information and analyzed it according to specific statistical methods. The statistical analysis helped him substantiate that the aggression of his participants and the aggressive acts they had seen on television were related, and that the relationship was not mere coincidence.

Although statistics is a branch of applied mathematics, you don't have to be a math whiz. Simple arithmetic is all we need for most of the calculations. For more complex statistics involving more complicated mathematics, computer programs are readily available. What is more important than learning the mathematical computations, however, is developing an understanding of when and why each type of statistic is used. The purpose of this appendix is to help you develop this understanding and to become a better consumer of the statistics that bombard us each day. In addition, we hope to increase your appreciation for the important role this form of math plays in the science of psychology.

GATHERING AND ORGANIZING DATA

Psychologists design their studies to facilitate gathering information about the factors they want to study. The information they obtain is known as *data* (data is plural; its singular is datum). When the data are gathered, they are generally in the form of numbers; if they aren't, they are converted to numbers. After they are gathered, the data must be organized in such a way that statistical analysis is possible. In the following section, we will examine the methods used to gather and organize information.

Variables

When studying a behavior, psychologists normally focus on one particular factor to determine whether it has an effect on the behavior. This factor is known as a *variable*, which is in effect anything that can assume more than one value (see Chapter 1). Height, weight, sex, eye color, and scores on an IQ test or a video game are all

they allow us to see the data in an organized manner and they make it easier to represent the data on a graph.

The simplest way to make a frequency distribution is to list all the possible test scores, then tally the number of people *(N)* who received those scores. **Table A.2** presents a frequency distribution using the raw data from Table A.1. As you can see, the data are now easier to read. Note how most of the test scores lie in the middle with only a few at the very high or very low end. This was not at all evident from looking at the raw data.

TABLE A.2 FREQUENCY DISTRIBUTION OF 50 STUDENTS ON MATH APTITUDE TEST

Score	Frequency	Score	Frequency
73	2	61	2
72	3	60	2
71	0	59	5
70	1	58	1
69	0	57	3
68	5	56	1
67	1	55	0
66	2	54	1
65	3	53	0
64	2	52	2
63	5	51	1
62	5	50	3
Total			50

This type of frequency distribution is practical when the number of possible scores is 20 or fewer. However, when there are more than 20 possible scores it can be even harder to make sense out of the frequency distribution than the raw data. This can be seen in **Table A.3**, which presents the hypothetical Psychology Aptitude Test scores for 50 students. Even though there are only 50 actual scores in this table, the number of possible scores ranges from a high of 1390 to a low of 400. If we included zero frequencies there would be 100 entries in a frequency distribution of

TABLE A.3 PSYCHOLOGY APTITUDE TEST SCORES FOR 50 COLLEGE STUDENTS

1350	750	530	540	750
1120	410	780	1020	430
720	1080	1110	770	610
1130	620	510	1160	630
640	1220	920	650	870
930	660	480	940	670
1070	950	680	450	990
690	1010	800	660	500
860	520	540	880	1090
580	730	570	560	740

How to Read a Graph

Every graph has several major parts. The most important are the labels, the axes (the vertical and horizontal lines), and the points, lines, or bars. Find these parts in Figure A.1.

The first thing we should all notice when reading a graph are the labels because they tell what data are portrayed. Usually the data consist of the descriptive statistics, or the numbers used to measure the dependent variables. For example, in Figure A.1 the horizontal axis is labeled "Psychology Aptitude Test Scores," which is the dependent variable measure; the vertical axis is labeled "Frequency," which means the number of occurrences. If a graph is not labeled, as we sometimes see in TV commercials or magazine ads, it is useless and should be ignored. Even when a graph *is* labeled, the labels can be misleading. For example, if graph designers want to distort the information, they can elongate one of the axes. Thus, it is important to pay careful attention to the numbers as well as the words in graph labels.

Next, we need to focus on the bars, points, or lines on the graph. In the case of histograms like the one in Figure A.1, each bar represents the class interval. The width of the bar stands for the width of the class interval, whereas the height of the bar stands for the frequency in that interval. Look at the third bar from the left in Figure A.1. This bar represents the interval "600 to 690 Psychology Aptitude Scores," which has a frequency of 10. Can you see how this directly corresponds to the same class interval in Table A.4? Graphs and tables are both merely alternate ways of illustrating information.

Reading point or line graphs is the same as reading a histogram. In a point graph, each point represents two numbers, one found along the horizontal axis and the other found along the vertical axis. A polygon is identical to a point graph except that it has lines connecting the points. Figure A.2 is an example of a polygon, where each point represents a class interval and is placed at the center of the interval and at the height corresponding to the frequency of that interval. To make the graph easier to read, the points are connected by straight lines.

Displaying the data in a frequency distribution or in a graph is much more useful than merely presenting raw data and can be especially helpful when researchers are trying to find relations between certain factors. However, as we explained earlier, if psychologists want to make precise predictions or explanations, we need to perform specific mathematical computations on the data. How we use these computations, or statistics, is the topic of our next section.

USES OF THE VARIOUS STATISTICS

The statistics psychologists use in a study depend on whether they are trying to describe and predict behavior or explain it. When they use statistics to describe behavior, as in reporting the average score on the hypothetical Psychology Aptitude Test, they are using **descriptive statistics**. When they use them to explain behavior, as Bandura did in his study of children modeling aggressive behavior seen on TV, they are using **inferential statistics**.

Descriptive statistics Mathematical methods used to describe and summarize sets of data in a meaningful way.

Inferential statistics Mathematical procedures that provide a measure of confidence about how likely it is that a certain result appeared by chance.

Descriptive Statistics

Descriptive statistics are the numbers used to describe the dependent variable. They can be used to describe characteristics of a *population* (an entire group, such as all people living in the United States) or a *sample* (a part of a group, such as a randomly selected group of 25 students from Cornell University). The major descriptive statistics include measures of central tendency (mean, median, and mode), measures of variation (variance and standard deviation), and correlation.

TABLE A.6 COMPUTATION OF MEDIAN FOR ODD AND EVEN NUMBERS OF IQ SCORES

IQ	IQ
139	137
130	135
121	121
116	116
107	108 ← middle score
101	106 ← middle score
98	105
96 ← middle score	101
84	98
83	97
82	N = 10
75	N is even
75	
68	
65	$\text{Median} = \frac{106 + 108}{2} = 107$
N = 15	
N is odd	

TABLE A.7 FINDING THE MODE FOR TWO DIFFERENT DISTRIBUTIONS

IQ	IQ
139	139
138	138
125	125
116 ←	116 ←
116 ←	116 ←
116 ←	116 ←
107	107
100	98 ←
98	98 ←
98	98 ←
Mode = most frequent score	Mode = 116 and 98
Mode = 116	

Mode Of all the measures of central tendency, the easiest to compute is the *mode*, which is merely the most frequent score. It is computed by finding the score that occurs most often. Whereas there is always only one mean and only one median for each distribution, there can be more than one mode. **Table A.7** shows how to find the mode in a distribution with one mode (unimodal) and in a distribution with two modes (bimodal).

There are several advantages to each of these measures of central tendency, but in psychological research the mean is used most often. A book solely covering psychological statistics will provide a more thorough discussion of the relative values of these measures.

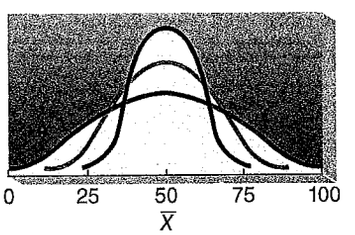

FIGURE A.3 THREE DISTRIBUTIONS HAVING THE SAME MEAN BUT A DIFFERENT VARIABILITY

Measures of Variation

When describing a distribution, it is not sufficient merely to give the central tendency; it is also necessary to give a *measure of variation*, which is a measure of the spread of the scores. By examining this **range**, or spread of scores, we can determine whether the scores are bunched around the middle or tend to extend away from the middle. **Figure A.3** shows three different distributions, all with the same mean but with different spreads of scores. You can see from this figure that, in order to describe these different distributions accurately, there must be some measures of the variation in their spread. The most widely used measure of variation is the **standard deviation**, which is represented by a lowercase s. The standard deviation is a standard measurement of how much the scores in a distribution deviate from the mean. The formula for the standard deviation is

$$s = \sqrt{\frac{\Sigma(X - \overline{X})^2}{N}}$$

Range A measure of the dispersion of scores between the highest and lowest scores.

Standard deviation A computed measure of how much scores in a sample differ from the mean of the sample.

Table A.8 illustrates how to compute the standard deviation.

Most distributions of psychological data are bell-shaped. That is, most of the scores are grouped around the mean, and the farther the scores are from the mean in either direction, the fewer the scores. Notice the bell shape of the distribution

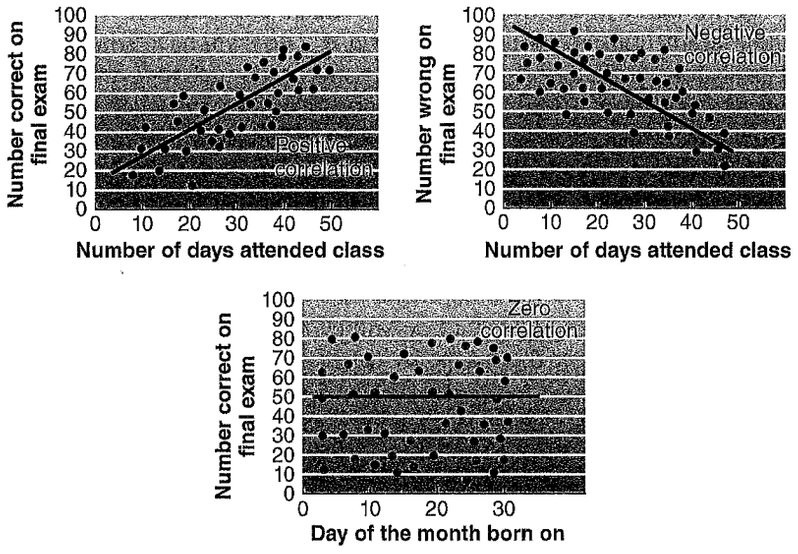

FIGURE A.5 THREE TYPES OF CORRELATION

Positive correlation (top left): as the number of days of class attendance increases, so does the number of correct exam items. Negative correlation (top right): as the number of days of class attendance increases, the number of incorrect exam items decreases. Zero correlation (bottom): the day of the month on which one is born has no relationship to the number of exam items correct.

(no) *relationship* when the two variables vary totally independently of one another (e.g., there is no relationship between your height and the color of your toothbrush). **Figure A.5** illustrates these three types of correlations.

The computation and the formula for a correlation coefficient (correlation coefficient is delineated by the letter *"r")* are shown in **Table A.9**. The correlation coefficient *(r)* always has a value between +1 and −1 (it is never greater than +1 and it is never smaller than −1). When r is close to +1, it signifies a high positive relationship between the two variables (as one variable goes up, the other variable also goes up). When r is close to −1, it signifies a high negative relationship between the two variables (as one variable goes up, the other variable goes down). When r is 0, there is no linear relationship between the two variables being measured.

TABLE A.9 COMPUTATION OF CORRELATION COEFFICIENT BETWEEN HEIGHT AND WEIGHT FOR 10 MEN

Height (inches) X	X^2	Weight (pounds) Y	Y^2	XY
73	5,329	210	44,100	15,330
64	4,096	133	17,689	8,512
65	4,225	128	16,384	8,320
70	4,900	156	24,336	10,920
74	5,476	189	35,721	13,986
68	4,624	145	21,025	9,860
67	4,489	145	21,025	9,715
72	5,184	166	27,556	11,952
76	5,776	199	37,601	15,124
71	5,041	159	25,281	11,289
700	49,140	1,630	272,718	115,008

$$r = \frac{N \cdot \Sigma XY - \Sigma X \cdot \Sigma Y}{\sqrt{[N \cdot \Sigma X^2 - (\Sigma X)^2}\sqrt{[N \cdot \Sigma Y^2 - (\Sigma Y)^2]}}$$

$$r = \frac{10 \cdot 115{,}008 - 700 \cdot 1{,}630}{\sqrt{[10 \cdot 49{,}140 - 700^2]}\sqrt{[10 \cdot 272{,}718 - 1{,}630^2]}}$$

$$r = 0.92$$

Appendix B

ANSWERS TO SELF-TEST RETRIEVAL PRACTICE QUESTIONS AND RESEARCH CHALLENGES

Chapter 1 Introduction and Research Methods

Self-Test—*Introducing Psychology* (p. 13) 1. d. 2. a. 3. c. 4. a. **Self-Test—*The Science of Psychology* (p. 17)** 1. c. 2. d. 3. b. 4. Step 1 = Observation and literature review, Step 2 = Testable hypothesis, Step 3 = Research design, Step 4 = Data collection and analysis, Step 5 = Publication, Step 6 = Theory development. **Self-Test—*Research Methods* (p. 27)** 1. b. 2. b. 3. c. 4. d. 5. b. **Self-Test—*Strategies for Student Success* (p. 30)** 1. Survey, Question, Read, Recite, Review, and wRite. 2. a. 3. d. 4. a. ***Research Challenge* (p. 25)**. Question 1: Study 1 = experimental; Study 2 = descriptive and correlational. As you'll discover in later psychology classes, descriptive and correlational studies often overlap. Question 2: Study 1: IV = political similarity; DV = interest in dating, ratings of physical attractiveness. Study 2: If you chose descriptive, the answer is archival research. If you chose correlational, this is a positive correlation.

Chapter 2 Neuroscience and Biological Foundations

Self-Test—*Our Genetic Inheritance* (pp. 36–37) 1. b. 2. d. 3. a. 4. a. **Self-Test—*Neural Bases of Behavior* (p. 42)** 1. c. 2. b. 3. c. 4. b. **Self-Test—*Nervous System Organization* (p. 48)** 1. c. 2. d. 3. d. 4. a. **Self-Test—*A Tour Through the Brain* (pp. 57–58)** 1. Compare your answers to Figure 2.19 (p. 49). 2. Compare your answers to Figure 2.24 (p. 53). 3. b. 4. d. ***Research Challenge* (p. 54)**. Question 1: Descriptive. Question 2: Case study.

Chapter 3 Stress and Health Psychology

Self-Test—*Understanding Stress* (pp. 68–69) 1. d. 2. c. 3. c. 4. b. **Self-Test—*Stress and Illness* (p. 74)** 1. d. 2. d. 3. c. 4. b. **Self-Test—*Health Psychology and Stress Management* (p. 79)** 1. d. 2. a. 3. b. 4. d. ***Research Challenge* (p. 70)**. Question 1: Descriptive and correlational. As you'll discover in later psychology classes, descriptive and correlational studies often overlap. Question 2: If you chose descriptive, the answer is survey/interview. If you chose correlational, this is a positive correlation.

Chapter 4 Sensation and Perception

Self-Test—*Understanding Sensation* (p. 89) 1. a. 2. c. 3. a. 4. b. **Self-Test—*How We See and Hear* (pp. 94–95)** 1. Compare your answers to Figure 4.8 (p. 91). 2. c. 3. Compare your answers to Figure 4.9 (p. 93). 4. c. **Self-Test—*Our Other Important Senses* (p. 99)** 1. c. 2. c. 3. d. 4. d. **Self-Test—*Understanding Perception* (p. 108–109)** 1. c. 2. b. 3. a. 4. b. 5. b. ***Research Challenge* (p. 97)**. Question 1: Experimental. Question 2: IV = whether and when drank carrot juice. DV = liking of carrot-flavored cereal, amount of cereal eaten. Note that experiments, like this one, often contain more than one level (or treatment) for the independent variable (IV), as well as multiple measures for the dependent variable (DV).

Chapter 5 States of Consciousness

Self-Test—*Consciousness, Sleep, and Dreaming* (pp. 125–126) 1. b. 2. d. 3. c. 4. a. **Self-Test—*Psychoactive Drugs* (pp. 132–133)** 1. a. 2. c. 3. a. 4. d. **Self-Test—*Meditation and Hypnosis* (p. 136)** 1. d. 2. d. 3. c. 4. c. ***Research Challenge* (p. 116)**. Question 1: Study 1 = Descriptive. Study 2 = Experimental. Question 2: Study 1 = Naturalistic observation. Study 2: IV = condition (no cell phone, cell phone, intoxicated). DV = number of accidents, brake reaction time, speed. Note that experiments, like this one, often contain more than one level (or treatment) for the independent variable (IV), as well as multiple measures for the dependent variable (DV).

Chapter 6 Learning

Self-Test—*Classical Conditioning* (p. 159) 1. c. 2. c. 3. d. 4. d. **Self-Test—*Operant Conditioning* (pp. 167–168)** 1. b. 2. a. 3. c. 4. c. **Self-Test—*Cognitive-Social Learning* (p. 172)** 1. c. 2. c. 3. a. 4. b. **Self-Test—*Biology of Learning* (p. 175)** 1. d. 2. b. 3. d. 4. c. ***Research Challenge* (p. 171)**. Question 1: Descriptive. Question 2: Survey/interview.

Chapter 7 Memory

Self-Test—*The Nature of Memory* (p. 188) 1. d. 2. a. 3. b. 4. c. **Self-Test—*Forgetting* (p. 193)** 1. a. 2. b. 3. c. 4. b. **Self-Test—*Biological Bases of Memory* (p. 199)** 1. c. 2. d. 3. d. 4. c. **Self-Test—*Memory Distortions* (p. 204)** 1. c. 2. a. 3. c. 4. d. ***Research Challenge* (p. 202)**. Question 1: Descriptive. Question 2: Survey/interview.

Chapter 8 Thinking, Language, and Intelligence

Self-Test—*Thinking* (p. 215) 1. c. 2. b. 3. a. 4. d. **Self-Test—*Language* (p. 221)** 1. d. 2. a. 3. b. 4. d. **Self-Test—*Intelligence* (p. 233)** 1. d. 2. b. 3. c. 4. d. ***Research Challenge* (p. 231)**. Question 1: Descriptive. Question 2: Archival research.

Chapter 9 Lifespan Development

Self-Test—*Studying Development* (p. 242) 1. d. 2. d. 3. a. 4. c. **Self-Test—*Physical Development* (pp. 250–251)** 1. b. 2. d. 3. a. 4. c. 5. d. **Self-Test—*Cognitive Development* (p. 259)** 1. c. 2. d. 3. d. 4. c. **Self-Test—*Social-Emotional Development* (pp. 269–270)** 1. a. 2. d. 3. c. 4. b. ***Research Challenge* (p. 239)**. Question 1: Descriptive. Question 2: Case study.