12

CHAPTER TWELVE

Psychological Disorders

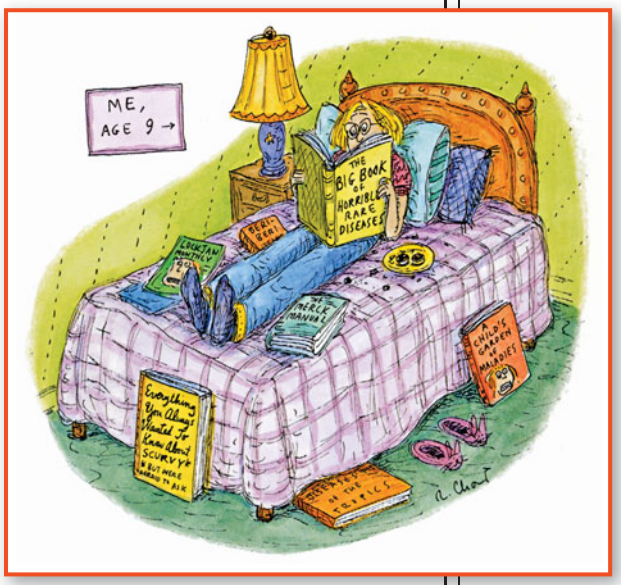
MARGARET, A 39-YEAR-OLD MOTHER, believed that God was punishing her for marrying a man she did not love and bringing two children into the world. As her punishment, God had made her and her children immortal so that they would have to suffer in their unhappy home life forever—a realization that came to her one evening when she was washing dishes and saw a fork lying across a knife in the shape of a cross. Margaret found further support for her belief in two pieces of evidence. First, a local TV station was rerunning old episodes of *The Honeymooners,* a 1950s situation comedy in which the main characters often argue and shout at each other. She saw this as a sign from God that her own marital conflict would go on forever. Second, she believed (falsely) that the pupils of her children's eyes were fixed in size and would neither dilate nor contract—which she interpreted as a sign of their immortality (Oltmanns, Neale, & Davison, 1991). Margaret was eventually diagnosed as suffering from schizophrenia, one of the most devastating and mystifying of the **psychological disorders**, *disorders reflecting abnormalities of the mind.* ■

LEONARD MCCOMBE/TIME LIFE PICTURES/GETTY IMAGES

Is a bitter argument on TV a sign from God? Probably not, but for a viewer troubled by a mental disorder like schizophrenia, excess meaning may be found all around.

psychological disorders Disorders reflecting abnormalities of the mind.

medical model The conceptualization of psychological abnormalities as diseases that, like biological diseases, have symptoms and causes and possible cures.



ROZ CHAST

Psychological disorders (sometimes called mental disorders) are hard to define and explain. Psychiatrists and psychologists agree that a psychological disorder is not, say, extreme anxiety before a chemistry test or deep sadness at the death of a beloved pet. To qualify as a psychological disorder, thoughts, feelings, and emotions must be persistent, harmful to the person experiencing them, and uncontrollable. Approximately 40% of people will develop some type of psychological disorder during the course of their lives—at a substantial cost in health, productivity, and happiness (Kessler et al., 1994; Narrow et al., 2002; Regier et al., 1993; Robins & Regier, 1991). Data compiled by the Global Burden of Disease Study reveal that, after cardiovascular disease, psychological disorders are the second-greatest contributor to a loss of years of healthy life (Murray & Lopez, 1996). Problems of the head are nearly as great a plague on humanity as problems of the heart.

Psychologists who study mental disorders seek to uncover ways to understand, treat, and prevent such human misery. And because the mindbugs they uncover reveal the mind's limits and functions, the study of mental disorders offers insights into the nature of normal mental functioning. This chapter goes deeper into the study of mindbugs than does any other chapter of the book because it is devoted to the psychological problems that are so persistent and intense that they interfere with people's lives. In discovering what goes wrong in psychological disorder, we learn what the mind must do in order to run trouble-free.

The study of psychological disorders can be unsettling because you may well see yourself mirrored in the various conditions. Like medical students who come to worry about their own symptoms with each new disease they examine, students of abnormal psychology can catch their own version of "medical students' disease," noticing personal oddities as they read about the peculiarities of others (Woods, Natterson, & Silverman, 1966). Is your late-night frenzy to finish an assignment a kind of mania? Is your fear of snakes a phobia? Does forgetting where you left your keys qualify you for diagnosis with a dissociative disorder? Please relax. You may not always avoid self-diagnosis, but you're not alone. Studying mental disorders heightens everyone's sensitivity to his or her own eccentricities. In fact, you would be "abnormal" if studying mental disorders *didn't* make you reflect on yourself.

In this chapter, we first consider the question, "What is abnormal?" The enormously complicated human mind can produce behaviors, thoughts, and emotions that change radically from moment to moment. How do psychologists decide that a particular mind is disordered? We will examine the key factors that must be weighed in making such a decision. Our exploration of psychological disorders will then focus on each of several major forms of mental disorder, including anxiety disorders, dissociative disorders, mood disorders, schizophrenia, and personality disorders. As we view each of these problems, we will look at how they can influence thought and behavior, and at what is known about their prevalence and their causes.

Identifying Psychological Disorders: What Is Abnormal?

The idea of a *psychological disorder* is a relatively recent invention, historically speaking. People who act strangely or report bizarre thoughts or emotions have been known since ancient times, but their difficulties were often understood in the context of religion or the supernatural. In some cultures and religious traditions, madness is still interpreted as possession by animal spirits or demons, as enchantment by a witch or shaman, or as God's punishment for wrongdoing. In many societies, including our own, people with

SPENCER 1929

According to the theory of physiognomy, mental disorders could be diagnosed from facial features. This fanciful theory is now discredited as superstition but was popular from antiquity until the early 20th century.

psychological disorders have been feared and ridiculed, and often treated as criminals—punished, imprisoned, or put to death for their "crime" of deviating from the normal.

Over the past 200 years, these ways of looking at psychological abnormalities have largely been replaced in industrialized areas of the world by a **medical model**, *the conceptualization of psychological disorders as diseases that, like biological diseases, have symptoms and causes and possible cures*. Treating abnormal behavior in the way we treat illness suggests that a first step is to determine the nature of the problem through *diagnosis*. In diagnosis, clinicians seek to determine the nature of the patient's mental disease by assessing *symptoms*—behaviors, thoughts, and emotions suggestive of an underlying abnormal *syndrome,* a coherent cluster of symptoms usually due to a single cause. So, for example, just as a fever, sniffles, and cough are symptoms of a cold, Margaret's delusions, paranoia and irrational beliefs can be viewed as symptoms of her schizophrenia.

What's the first step in helping someone with a psychological disorder?

As useful as the medical model can be, it should nonetheless be viewed with some skepticism. Every action or thought suggestive of abnormality cannot be traced to an underlying disease (American Psychiatric Association, 2000; Keisler, 1999; Persons, 1986). And, as you will discover in Chapter 13, some of the most successful treatments for abnormal behavior or thought focus on simply eliminating the behavior or thought; no effort is made to treat the root "syndrome." Nevertheless, the medical model is still a vast improvement over older alternatives—such as viewing psychological disorders as the work of witchcraft or as punishment for sin. Viewing psychological disorders as medical problems reminds us that people who are suffering deserve care and treatment, not condemnation.

To understand how psychological disorders are defined and diagnosed, we'll first consider definitions of normal and abnormal behavior. Then we'll look at how mental disorders are categorized into groups, how the causes and cures of disorders are viewed in the medical model, and what consequences can occur—for better or for worse—when such disorders are diagnosed.

ARCHIVO ICONOGRAFICO, S.A./CORBIS

Interior of a Madhouse, *Francisco de Goya (1746–1828), 1815–1819. Early treatment of mental disorders amounted to little more than imprisonment.*

***DSM-IV-TR* (*Diagnostic and Statistical Manual of Mental Disorders* [*Fourth Edition, Text Revision*])** A classification system that describes the features used to diagnose each recognized mental disorder and indicates how the disorder can be distinguished from other, similar problems.

Classification of Psychological Disorders

To facilitate diagnosis, psychologists have generally adopted an approach developed by psychiatrists—physicians concerned with treatment of mental disorders—who use a system for classifying mental disorders. In 1952, in recognition of the need to have a consensual diagnostic system for therapists and researchers, the first version of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM*) was published, followed by a revision in 1968 (*DSM-II*). These early versions provided a common language for talking about disorders, but the diagnostic criteria were still often vague and based on tenuous theoretical assumptions.

The most current version of this manual is the *Diagnostic and Statistical Manual of Mental Disorders* (*Fourth Edition, Text Revision*), or *DSM-IV-TR* (American Psychiatric Association, 2000). The ***DSM-IV-TR*** is *a classification system that describes the features used to diagnose each recognized mental disorder and indicates how the disorder can be distinguished from other, similar problems*. Each disorder is named and classified as though it were a distinct illness. The major mental disorders distinguished in the *DSM-IV-TR* are shown in TABLE 12.1 on page 367.

A major misconception is the idea that a mental disorder can be defined entirely in terms of deviation from the average, the typical, or "healthy." Yes, people who have mental disorders may behave, think, or experience emotions in unusual ways, but simple departure from the norm can't be the whole picture, or we'd rapidly be diagnosing mental disorders in the most creative and visionary people—anyone whose ideas deviate from those around them.

Why is mental disease more than simply a departure from the norm?

The *DSM-IV-TR* definition takes these concerns into account by focusing on three key elements that must be present for a cluster of symptoms to qualify as a potential mental disorder:

- A disorder is manifested in symptoms that involve *disturbances in behavior, thoughts, or emotions*.
- The symptoms are associated with significant *personal distress or impairment*.
- The symptoms stem from an *internal dysfunction* (biological, psychological, or both).

So, on the one hand, if someone experiences extreme sadness and distress after the death of a loved one, for example, this would not be indicative of a mental disorder because bereavement is a normal, expected response that does not originate from internal dysfunction. On the other hand, a prolonged period of unremitting sadness that interferes with a person's ability to perform the activities of everyday life might indeed indicate depression, which is an example of a mood disorder, as shown in TABLE 12.1.

Why is it difficult to make reliable diagnoses?

As these examples suggest, determining the degree to which a person has a psychological disorder is always difficult. Psychological disorder exists along a continuum from normal to abnormal without a bright line of separation. The *DSM-IV-TR* recognizes this explicitly by recommending that diagnoses include a *global assessment of functioning*, a 0 to 100 rating of the person, with more severe disorders indicated by lower numbers and more effective functioning by higher numbers.

Even so, the path to reliable diagnosis remains thorny. In general, the *DSM-IV-TR* produces better diagnostic reliability than did earlier *DSM* versions, but critics argue that considerable room for improvement remains. Numerous diagnostic categories continue to depend on interpretation-based criteria rather than on observable behavior, and

DAVID GROSSMAN/ALAMY

Some atypical behavior may be based on ulterior motives, like making a statement about recycling

TABLE 12.1

Main *DSM-IV-TR* Categories of Mental Disorders

1. **Disorders usually first diagnosed in infancy, childhood, or early adolescence:** These include mental retardation, bed-wetting, etc.
2. **Delirium, dementia, amnestic, and other cognitive disorders:** These are disorders of thinking caused by Alzheimer's, human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS), Parkinson's disease, etc.
3. **Mental disorders due to a general medical condition not elsewhere classified:** These include problems caused by physical deterioration of the brain due to disease, drug use, etc.
4. **Substance-related disorders:** These problems are caused by dependence on alcohol, cocaine, tobacco, and so forth [see Chapter 8].
5. **Schizophrenia and other psychotic disorders:** This is a group of disorders characterized by major disturbances in perception, language and thought, emotion, and behavior [this chapter].
6. **Mood disorders:** These are problems associated with severe disturbances of mood, such as depression, mania, or alternating episodes of both [this chapter].
7. **Anxiety disorders:** These include problems associated with severe anxiety, such as phobias and obsessive-compulsive disorder [this chapter], and posttraumatic stress disorder [see Chapter 15].
8. **Somatoform disorders:** These are problems related to unusual preoccupation with physical health or physical symptoms with no physical cause [see Chapter 15].
9. **Factitious disorders:** These are disorders that the individual adopts to satisfy some economic or psychological need [see Chapter 15].
10. **Dissociative disorder:** In these types of disorders, the normal integration of consciousness, memory, or identity is suddenly and temporarily altered, such as amnesia and dissociative identity disorder [this chapter].
11. **Sexual and gender identity disorders:** These include problems related to unsatisfactory sexual activity, finding unusual objects or situations arousing, gender identity problems, and so forth.
12. **Eating disorders:** These are problems related to food, such as anorexia nervosa and bulimia nervosa [see Chapter 10].
13. **Sleep disorders:** These include serious disturbances of sleep, such as insomnia, sleep terrors, or hypersomnia [see Chapter 8].
14. **Impulse control disorder not elsewhere classified:** These problems include kleptomania, pathological gambling, and pyromania.
15. **Adjustment disorders:** These problems are related to specific stressors such as divorce, family discord, and economic concern.
16. **Personality disorders:** These problems are related to lifelong behavior patterns such as self-centeredness, overdependency, and antisocial behaviors [this chapter].
17. **Other conditions that may be a focus of clinical attention:** These include problems related to physical or sexual abuse, relational problems, and occupational problems.

Source: From the *DSM-IV-TR* (American Psychiatric Association, 2000).

diagnosis continues to focus on patient self-reports (which are susceptible to censorship and distortion). Levels of agreement among different diagnosticians can vary depending on the diagnostic category (Bertelsen, 1999; Nathan & Lagenbucher, 1999). Agreement among diagnosticians on, say, whether a patient has schizophrenia may even depend on the clinic setting. Such disagreement may not reflect differences in the prevalence of schizophrenia in various localities but rather in the array of symptoms that the clinicians were trained to expect in people with the disease (Keller et al., 1995).

"First off, you're not a nut. You're a legume."

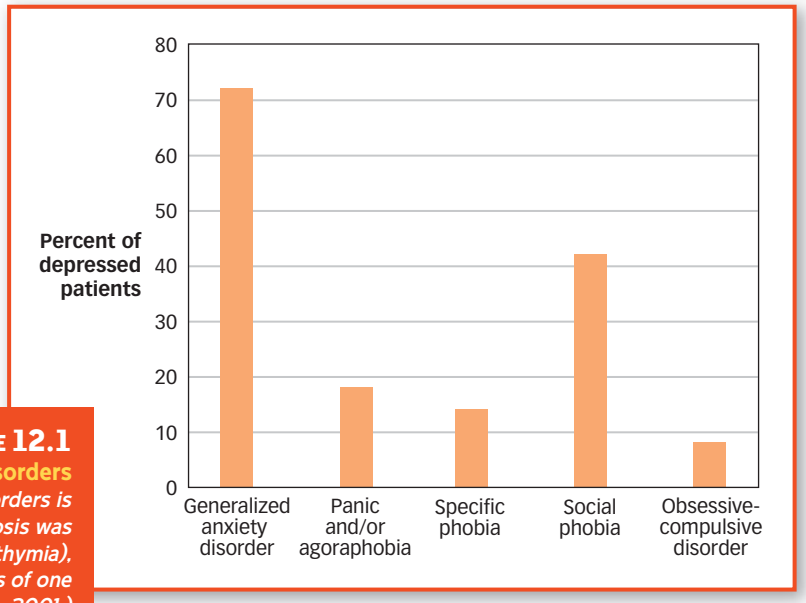


FIGURE 12.1
Comorbidity of Depression and Anxiety Disorders
The comorbidity of depression and anxiety disorders is substantial. Of 102 patients whose primary diagnosis was depression (major depressive disorder or dysthymia), large percentages also had a secondary diagnosis of one or more anxiety disorders. (Brown et al., 2001.)

Diagnostic difficulty is further increased when a person suffers from more than one disorder. As shown in **FIGURE 12.1,** for example, people with depression (a mood disorder) often have secondary diagnoses of anxiety disorders. *The co-occurrence of two or more disorders in a single individual* is referred to as **comorbidity** and is relatively common in patients seen within the *DSM* diagnostic system (Kessler et al., 1994). Comorbidity raises a host of confusing possibilities: A person could be depressed because a phobia makes social situations impossible, or the person could be phobic about showing a despairing mood in public, or the disorders could be unrelated but co-occurring. Diagnosticians try hard to solve the problem of comorbidity because understanding the underlying basis for a person's disorder may suggest methods of treatment.

WALT DISNEY PICTURES/PHOTOFEST

The Mad Hatter in Alice in Wonderland *was Lewis Carroll's portrayal of a mental disorder common among hatmakers in the 1800s. Hatters could become "mad as a hatter" because they unwittingly exposed themselves to a mercury compound with serious side effects when they processed fur into felt for hats.*

Causation of Psychological Disorders

The medical model of psychological disorder suggests that knowing a person's diagnosis is useful because any given category of mental illness is likely to have a distinctive cause. In other words, just as different viruses, or bacteria, or types of trauma, or genetic abnormalities cause different physical illnesses, so a specifiable pattern of causes (or *etiology*) may exist for different psychological disorders. The medical model also suggests that each category of psychological disorder is likely to have a common *prognosis,* a typical course over time and susceptibility to treatment and cure. Unfortunately, this basic medical model is usually an oversimplification; it is rarely useful to focus on a *single cause* that is *internal* to the person and that suggests a *single cure.*

"Mad Hatter syndrome," first described in the 1800s in workers who used a mercury compound in making felt hats, was one of those rare single-cause disorders. The symptoms: trembling, loss of memory and coordination, slurred speech, depression, and anxiety. The cause: mercury poisoning. The cure: getting out of the hat business. Things are seldom so simple, however, and a full explanation of all the different ways in which the mind can become disordered needs to take into account multiple levels of causation.

Why does assessment require looking at a number of factors?

An integrated perspective that incorporates biological, psychological, and environmental factors offers the most comprehensive and useful framework for understanding most psychological disorders. On the biological side, the focus is on genetic influences, biochemical imbalances, and structural abnormalities of the brain. The psychological perspective focuses on maladaptive learning and coping, cognitive biases, dysfunctional

attitudes, and interpersonal problems. Environmental factors include poor socialization, stressful life circumstances, and cultural and social inequities. The complexity of causation suggests that different individuals can experience a similar psychological disorder (e.g., depression) for different reasons. A person might fall into depression as a result of biological causes (e.g., genetics, hormones), psychological causes (e.g., faulty beliefs, hopelessness, poor strategies for coping with loss), environmental causes (e.g., stress or loneliness), or (more likely) as a result of some combination of these factors. And, of course, multiple causes mean there may not be single cures.

The observation that most disorders have both internal (biological and psychological) *and* external (environmental) causes has given rise to a theory known as the **diathesis-stress model**, which suggests that *a person may be predisposed for a psychological disorder that remains unexpressed until triggered by stress*. The diathesis is the internal predisposition, which could be genetic, and the stress is the external trigger. For example, most people were able to cope with their strong emotional reactions to the terrorist attack of September 11, 2001. However, for some who had a predisposition to negative emotions or were already contending with major life stressors, the horror of the events may have overwhelmed their ability to cope, thereby precipitating a psychological disorder. Although diastheses can be inherited, it's important to remember that heritability is not destiny. A person who inherits a diathesis may never encounter the precipitating stress, whereas someone with little genetic propensity to a disorder may come to suffer from it given the right pattern of stress. The tendency to oversimplify mental disorders by attributing them to single, internal causes is nowhere more evident than in the interpretation of the role of the brain in psychological disorders. Brain scans of people with and without disorders can give rise to an unusually strong impression that psychological problems are internal—after all, there it is!—and perhaps also permanent, inevitable, and even untreatable. Brain influences and processes are fundamentally important for knowing the full story of psychological disorders but are not the only chapter in that story.

Culture & Community

Can People in Different Parts of the World Have Different Mental Disorders?

Many of the major forms of psychological disorder, such as schizophrenia, are stable across cultures, but some psychological problems appear in some cultures and not others. Stress is more likely to be exhibited as depression or anxiety in Western societies, for example, but more likely to be manifested in physical problems, such as fatigue or weakness in China (Kleinman, 1986, 1988).

To aid researchers and therapists in their quest to understand the relevance of cultural factors to mental health, the *DSM-IV-TR* includes a description of various "culture-bound syndromes," disorders that appear only in some cultures. Here's a sample.

- *Ataque de nervios*. A type of distress principally reported among Latinos with symptoms including uncontrollable shouting, attacks of crying, trembling, heat in the chest rising into the head, and verbal or physical aggression.
- *Ghost sickness*. A preoccupation with death and the dead observed among members of some Native American tribes. Symptoms can include bad dreams, weakness, feelings of danger, loss of appetite, fainting, dizziness, fear, anxiety, hallucinations, loss of consciousness, confusion, feelings of futility, and a sense of suffocation.
- *Koro*. A sudden and intense anxiety that the penis (or in females, the vulva or nipples) will recede into the body and possibly cause death. The syndrome is reported in South and East Asia and at times occurs as local epidemics.
- *Mal de ojo*. A concept widely found in Mediterranean cultures, *mal de ojo* is a Spanish phrase translated into English as "evil eye" and is believed to result from looking at someone, usually a child, with envy. The target of the envy can develop a variety of symptoms, including fitful sleep, crying without apparent cause, diarrhea, vomiting, and fever.

What are the limitations of using brain scans for diagnosing?

Searching for the biological causes of psychological disorders in the brain and body also tends to invite a particular error in explanation—the *intervention-causation fallacy*. This fallacy involves the assumption that if a treatment is effective, it must address the cause of the problem. This may sometimes be true, but it is certainly not a general rule. To get a sense of the error in this logic, imagine that you've spent sleepless night after sleepless night worrying about a loved one who was recently hospitalized with a serious illness. You discover that taking a sleeping medicine before bed helps you sleep. On the basis of your favorable response, should we conclude that your insomnia was caused by a deficiency of sleeping pills—that a part of your brain needed the

comorbidity The co-occurrence of two or more disorders in a single individual.

diathesis-stress model A model suggesting that a person may be predisposed for a mental disorder that remains unexpressed until triggered by stress.

CECIL PLANEDIN

Feeling lonely and depressed? Join the society of loners!

chemicals in the pills? Of course not. Your anxiety and sleeplessness were due to your loved one's illness, not to the absence of a pill. Be cautious about drawing inferences about causality based on responsiveness to treatment; the cure does not necessarily point to the cause.

The diagnosis and classification of mental disorders is a useful basis for exploring causes and cures of psychological problems. At the same time, these tools make it all too easy to assume that the problems arise from single, internal causes that are inherited and involve brain dysfunction—and that therefore can be dispelled with an intervention that simply eliminates the cause. Psychological problems are usually more challenging and complicated than this ideal model would suggest.

Consequences of Labeling

An important complication in the diagnosis and classification of psychological disorders is the effect of labeling. Psychiatric labels can have negative consequences, since many of these labels carry the baggage of negative stereotypes and stigma, such as the idea that mental disorder is a sign of personal weakness, or the idea that psychiatric patients are dangerous. The stigma associated with mental disorders may explain why nearly 70% of people with diagnosable psychological disorders do not seek treatment (Kessler et al., 1996; Regier et al., 1993; Sussman, Robins, & Earls, 1987).

Unfortunately, educating people about mental disorders does not dispel the stigma borne by those with these diseases (Phelan et al., 1997). In fact, expectations created by psychiatric labels can sometimes even compromise the judgment of mental health professionals (Garb, 1998; Langer & Abelson, 1974; Temerlin & Trousdale, 1969). In a classic demonstration of this phenomenon, psychologist David Rosenhan and six associates reported to different mental hospitals complaining of "hearing voices"—a symptom sometimes found in people with schizophrenia. Each was admitted to a hospital, and each promptly reported that the symptom had ceased. Even so, hospital staff were reluctant to identify these "patients" as normal: it took an average of 19 days for these "patients" to secure their release, and even then they were released with the diagnosis of "schizophrenia in remission" (Rosenhan, 1973). Apparently, once hospital staff had labeled these "patients" as having a psychological disease, the label stuck.

Why might someone avoid seeking help?

Labeling may even affect how the labeled person views him- or herself; persons given such a label may come to view themselves not just as mentally disordered, but as hopeless or worthless. Such a view may cause these persons to develop an attitude of defeat and, as a result, to fail to work toward their own recovery. As one small step toward counteracting such consequences, clinicians have adopted the important practice of applying labels to the disorder and not to the person with the disorder. For example, a patient might be described as "a person with schizophrenia," not as "a schizophrenic." You'll notice that we follow this model in the text.

© THE NEW YORKER COLLECTION 2001 J. C. DUFFY FROM CARTOONBANK.COM. ALL RIGHTS RESERVED

"We don't use the word 'crazy' in this office, Mr. Channing. Everywhere else, sure, but not here."

summary quiz [12.1]

1. The view that a person may be predisposed for a psychological disorder that remains unexpressed until triggered by external causes is called
   a. the medical model.
   b. the diathesis-stress model.
   c. the comorbidity model.
   d. the intervention causation fallacy.

2. The assumption that if a treatment is effective, it must address the cause of the problem is called
   a. the medical model.
   b. the diathesis-stress model.
   c. the comorbidity model.
   d. the intervention causation fallacy.

3. Which of the following individuals is most likely to have a psychological disorder, according to the *DSM-IV-TR*?
   a. Brittany feels very anxious before she takes exams, even though she always performs well on them.
   b. Jeff was grief-stricken when his beloved dog died 5 years ago, and he still is not ready to get another dog.
   c. Since being demoted at her job 2 years ago, Jill has become hostile toward her colleagues and preoccupied with undermining their work performance while neglecting her own job responsibilities.
   d. Kyle was laid off 6 months ago when his company down-sized, and he has been unable to find work since. Lately, he has been feeling a great deal of distress.

Anxiety Disorders: When Fears Take Over

"Okay, time for a pop quiz that will be half your grade for this class!" If your instructor had actually said that, you would probably have experienced a wave of anxiety and dread. Your reaction would be appropriate, and—no matter how intense the feeling—it would not be a sign that you have a psychological disorder. In fact, situation-related anxiety is normal and can be adaptive—in this case, perhaps by reminding you to keep up with your textbook assignments so you are prepared for pop quizzes. When anxiety arises that is out of proportion to real threats and challenges, however, it is maladaptive. It can take hold of people's lives, stealing their peace of mind and undermining their ability to function normally. Pathological anxiety is expressed as an **anxiety disorder**, *the class of psychological disorder in which anxiety is the predominant feature.* People commonly experience more than one type of anxiety disorder at a given time, and there is significant comorbidity between anxiety and depression (Brown & Barlow, 2002). Among the anxiety disorders recognized in the *DSM-IV-TR* are *generalized anxiety disorder, phobic disorders, panic disorder,* and *obsessive-compulsive disorder.*

● When is anxiety harmful, and when is it helpful?

Generalized Anxiety Disorder

Terry, a 31-year-old man, began to experience debilitating anxiety during his first year as medical resident. The 36-hour on-call periods were grueling, and he became concerned that he and other interns were making too many errors and oversights. He worried incessantly for a year and finally resigned his position. However, he continued to be plagued with anxiety about making mistakes—self-doubt that extended to his personal relationships. When he eventually sought treatment, he described himself as "worthless" and unable to control his debilitating anxiety, and he complained of headaches and constant fatigue (Vitkus, 1996).

Terry's symptoms are typical of **generalized anxiety disorder (GAD)**—called *generalized* because the unrelenting worries are not focused on any particular threat; they are, in fact, often exaggerated and irrational. In people suffering from GAD, *chronic excessive*

anxiety disorder The class of mental disorder in which anxiety is the predominant feature.

generalized anxiety disorder (GAD) A disorder characterized by chronic excessive worry accompanied by three or more of the following symptoms: restlessness, fatigue, concentration problems, irritability, muscle tension, and sleep disturbance.

phobic disorders Disorders characterized by marked, persistent, and excessive fear and avoidance of specific objects, activities, or situations.

specific phobia A disorder that involves an irrational fear of a particular object or situation that markedly interferes with an individual's ability to function.

social phobia A disorder that involves an irrational fear of being publicly humiliated or embarrassed.

preparedness theory The idea that people are instinctively predisposed toward certain fears.

worry is accompanied by three or more of the following symptoms: restlessness, fatigue, concentration problems, irritability, muscle tension, and sleep disturbance. The uncontrollable worrying produces a sense of loss of control that can so erode self-confidence that simple decisions seem fraught with dire consequences. For example, Terry needed to buy a new suit for a special occasion but began shaking and sweating when he approached a clothing store because he was afraid of choosing the "wrong" suit. He became so anxious that he could not even enter the store.

About 5% of North Americans are estimated to suffer from GAD at some time in their lives (Kessler et al., 1994). Research suggests that both biological and psychological factors contribute to the risk of GAD. GAD occurs more frequently in lower-socioeconomic groups than in middle- and upper-income groups (Blazer et al., 1991) and is approximately twice as common in women as in men (Eaton et al., 1994). The condition is especially prevalent among people who have low incomes, are living in large cities, or are trapped in environments rendered unpredictable by political and economic strife.

What factors contribute to GAD?

WOLFGANG SPUNBARG/PHOTO EDIT

Potential anxiety victims? Generalized anxiety disorder is more common for women and children living below the poverty line than for others.

The causes of GAD are unknown; some patients with GAD respond to treatment with drugs that appear to stimulate the neurotransmitter gamma-aminobutyric acid (GABA), but as you read in the previous section, just because a drug remediates the symptoms, this does not necessarily mean that GAD is caused by an imbalance in GABA. Some research suggests that unpredictable traumatic experiences in childhood increase the risk of developing GAD, which supports the idea that environmental stressors play a role (Torgensen, 1986). Moreover, major life changes (new job, new baby, personal loss, physical illness, etc.) often immediately precede the development of GAD (Blazer, Hughes, & George, 1987). The relatively high rates of GAD among women may also be related to stress because women are more likely than men to live in poverty, experience discrimination, or be subjected to sexual or physical abuse (Koss, 1990; Strickland, 1991). Still, many people who might be expected to develop GAD don't, supporting the diathesis-stress notion that biological and/or genetic vulnerability must also be a key factor in this disorder.

Phobic Disorders

Unlike the generalized anxiety of GAD, anxiety in a phobic disorder is more specific. The *DSM-IV-TR* describes **phobic disorders** as characterized by *marked, persistent, and excessive fear and avoidance of specific objects, activities, or situations*. An individual with a phobic disorder recognizes that the fear is irrational but cannot prevent it from interfering with everyday functioning. Consider Mary, a 47-year-old mother of three, who sought treatment for *claustrophobia*—an intense fear of enclosed spaces. She traced her fear to childhood, when her older siblings would scare her by locking her in closets and confining her under blankets. Her own children grown, she wanted to find a job but could not because of a terror of elevators and other confined places that, she felt, shackled her to her home (Carson, Butcher, & Mineka, 2000). Many people feel anxious in enclosed spaces, but Mary's fears were abnormal and dysfunctional because they were wildly disproportional to any actual risk and because they imposed unwanted restrictions on her life.

Phobic disorders can be divided into two major classes. A **specific phobia** is *an irrational fear of a particular object or situation that markedly interferes with an individual's ability to function.* Specific phobias fall into five categories: (1) animals (e.g., dogs, cats,

ONLY HUMAN

DON'T LOOK DOWN! A 1992 *Los Angeles Times* story on fear of heights featured an interview with the psychotherapist who heads the Anxiety Disorders Association. He reported that one of his patients could cross the 200-foot-high Chesapeake Bay Bridge in Maryland only if his wife drove the car and locked him in the trunk.

rats, snakes, spiders); (2) natural environments (e.g., heights, darkness, water, storms); (3) situations (e.g., bridges, elevators, tunnels, enclosed places); (4) blood, injections, and injury; and (5) other phobias, including illness and death. Approximately 11% of people in the United States will develop a specific phobia during their lives and—for unknown reasons—the risk seems to be increasing in younger generations (Magee et al., 1996). With few exceptions (e.g., fear of heights), specific phobias are much more common among women than among men, with a ratio of about 4 to 1 (Kessler et al., 1994, 1996).

BETTMANN/CORBIS

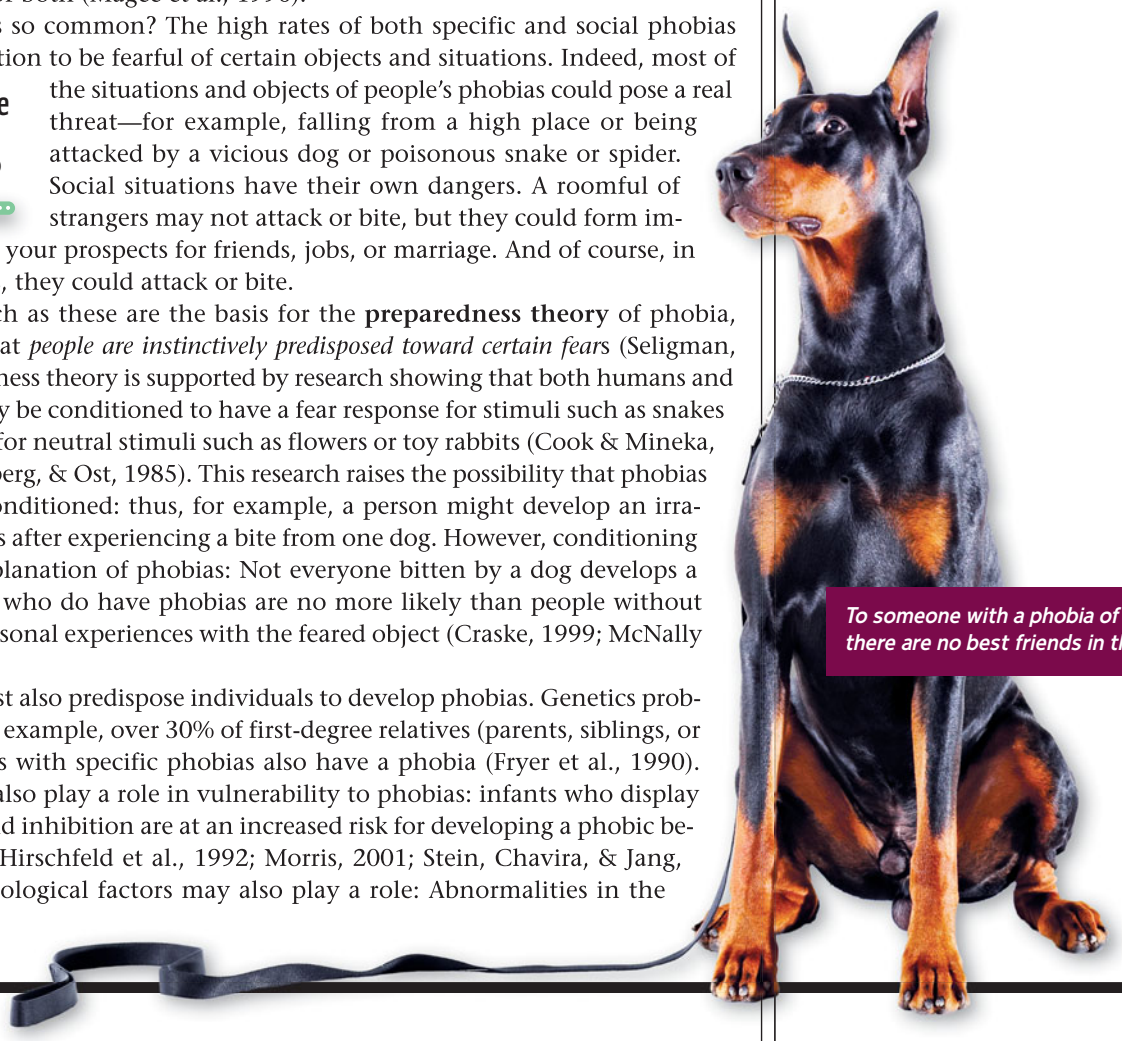
No fear of heights here. Construction workers eat their lunches atop a steel beam 800 feet above ground during the 1932 construction of the RCA Building (now the GE Building) in Rockefeller Center in Manhattan.

The second major class of phobic disorder is **social phobia,** which is *an irrational fear of being publicly humiliated or embarrassed.* Social phobia can be restricted to situations such as public speaking, eating in public, or urinating in a public bathroom, or the fear can be generalized to a variety of social situations that involve being observed or interacting with unfamiliar people. Individuals with social phobia try to avoid situations where unfamiliar people might evaluate them, and they experience intense anxiety and distress when public exposure is unavoidable. Social phobia can develop in childhood, but it typically emerges between early adolescence and the age of 25 (Schneier et al., 1992). Many people experience social phobia; about 11% of men and 15% of women qualify for diagnosis at some time in their lives (Kessler et al., 1994). Even higher rates are found among people who are undereducated, have low incomes, or both (Magee et al., 1996).

Why are phobias so common? The high rates of both specific and social phobias suggest a predisposition to be fearful of certain objects and situations. Indeed, most of the situations and objects of people's phobias could pose a real threat—for example, falling from a high place or being attacked by a vicious dog or poisonous snake or spider. Social situations have their own dangers. A roomful of strangers may not attack or bite, but they could form impressions that affect your prospects for friends, jobs, or marriage. And of course, in some very rare cases, they could attack or bite.

Why might we be predisposed to certain phobias?

Observations such as these are the basis for the **preparedness theory** of phobia, which maintains that *people are instinctively predisposed toward certain fears* (Seligman, 1971). The preparedness theory is supported by research showing that both humans and monkeys can quickly be conditioned to have a fear response for stimuli such as snakes and spiders but not for neutral stimuli such as flowers or toy rabbits (Cook & Mineka, 1989; Öhman, Dimberg, & Ost, 1985). This research raises the possibility that phobias can be classically conditioned: thus, for example, a person might develop an irrational fear of all dogs after experiencing a bite from one dog. However, conditioning isn't a complete explanation of phobias: Not everyone bitten by a dog develops a phobia, and people who do have phobias are no more likely than people without phobias to recall personal experiences with the feared object (Craske, 1999; McNally & Steketec, 1985).



THOMAS NORTHCUT/GETTY IMAGES

To someone with a phobia of dogs, there are no best friends in the park.

Other factors must also predispose individuals to develop phobias. Genetics probably plays a role; for example, over 30% of first-degree relatives (parents, siblings, or children) of patients with specific phobias also have a phobia (Fryer et al., 1990). Temperament may also play a role in vulnerability to phobias: infants who display excessive shyness and inhibition are at an increased risk for developing a phobic behavior later in life (Hirschfeld et al., 1992; Morris, 2001; Stein, Chavira, & Jang, 2001). And neurobiological factors may also play a role: Abnormalities in the

neurotransmitters serotonin and dopamine are more common in individuals who report phobias than among people who don't (Stein, 1998), and individuals with phobias sometimes show abnormally high levels of activity in the amygdala, an area of the brain linked with the development of emotional associations (discussed in Chapter 9 and in Hirschfeld et al., 1992; LeDoux, 1998; Morris, 2001; Ninan, 1999; Stein et al., 2001).

Panic Disorder

If you suddenly found yourself in danger of death, a wave of panic might wash over you. People who suffer panic attacks are frequently overwhelmed by such intense fears and by powerful physical symptoms of anxiety—in the absence of actual danger. Mindy, a 25-year-old art director, had been having panic attacks with increasing frequency, often two or three times a day, when she finally sought help at a clinic. The attacks began with a sudden wave of "horrible fear" that seemed to come out of nowhere, often accompanied by trembling, nausea, and a tightening of the chest. The attacks began when she was in high school and had continued intermittently ever since. During an episode, Mindy feared that she would do something crazy (Spitzer et al., 1994, pp. 201–202).

Mindy's condition, called **panic disorder,** is characterized by *the sudden occurrence of multiple psychological and physiological symptoms that contribute to a feeling of stark terror.* The acute symptoms of a panic attack typically last only a few minutes and include shortness of breath, heart palpitations, sweating, dizziness, and a fear that one is going crazy or about to die. Not surprisingly, panic attacks often send people rushing to emergency rooms or their physicians' offices for what they believe is a heart attack or other medical emergency (Hirschfeld, 1996).

Approximately 8% to 12% of the U.S. population reports having an occasional panic attack, typically during a period of intense stress (Norton et al., 1985; Salge, Beck, & Logan, 1988; Telch, Lucas, & Nelson, 1989). An occasional episode is not sufficient for a diagnosis of panic disorder. According to *DSM-IV-TR* criteria, panic disorder is only diagnosed if the individual experiences recurrent unexpected attacks and also reports significant dread and anxiety about having another attack. When this criterion is applied, approximately 3.5% of people will have diagnosable panic disorder sometime in their lives; of those, about three out of seven will also develop **agoraphobia**, *a specific phobia involving a fear of venturing into public places* (Kessler et al., 1994). These people are not afraid of public places in themselves; rather they are afraid of having a panic attack in a public place or around strangers. Panic disorder is especially prevalent among women, who are twice as likely to be diagnosed with it as are men (Weissman et al., 1997).

● What is it about public places that many agoraphobics fear?

Family studies suggest a modest hereditary component to panic disorder. If one identical twin has the disorder, the likelihood of the other twin having it is about 30% (Crowe, 1990; Kendler et al., 1995; Torgensen, 1983). Psychological factors may also play a role: People who experience panic attacks may be hypersensitive to physiological signs of anxiety, which they interpret as having disastrous consequences for their well-being. Supporting this cognitive explanation is research showing that people who are high in anxiety sensitivity (i.e., they believe that bodily arousal and other symptoms of anxiety can have dire consequences) have an elevated risk for experiencing panic attacks (Schmidt, Lerew, & Jackson, 1997; Telch et al., 1989). Thus, panic attacks may be traceable to the fear of fear itself. Understanding this psychological link may be key in developing therapies to treat patients who suffer from this disorder.

BOB DAEMMRICH/ THE IMAGE WORKS

In panic disorder with agoraphobia, the fear of having a panic attack in public may prevent the person from going outside.

Obsessive-Compulsive Disorder

Karen, a 34-year-old with four children, experienced intrusive, repetitive thoughts in which she imagined that one or more of her children was having a serious accident. In addition, an extensive series of protective counting rituals hampered her daily routine. For example, when grocery shopping, Karen had the feeling that if she selected the first

item (say, a box of cereal) on a shelf, something terrible would happen to her oldest child. If she selected the second item, some unknown disaster would befall her second child, and so on for the four children. Karen's preoccupation with numbers extended to other activities, most notably the pattern in which she smoked cigarettes and drank coffee: if she had one, she felt that she had to have at least four in a row or one of her children would be harmed in some way. She acknowledged that her counting rituals were irrational, but she found that she became extremely anxious when she tried to stop (Oltmanns et al., 1991).

Karen's symptoms are typical of **obsessive-compulsive disorder (OCD)**, in which *repetitive, intrusive thoughts (obsessions) and ritualistic behaviors (compulsions) designed to fend off those thoughts interfere significantly with an individual's functioning*. Anxiety plays a role in this disorder because the obsessive thoughts typically produce anxiety, and the compulsive behaviors are performed to reduce this anxiety. It is not uncommon for people to have occasional intrusive thoughts that prompt ritualistic behavior (e.g., double- or triple-checking to be sure the garage door is closed or the oven is off), but the obsessions and compulsions of OCD are intense, frequent, and experienced as irrational and excessive. Attempts to cope with the obsessive thoughts by trying to suppress or ignore them are of little or no benefit. In fact (as discussed in Chapter 8), thought suppression can backfire, increasing the frequency and intensity of the obsessive thoughts (Wegner, 1994a; Wenzlaff & Wegner, 2000).

How effective is willful effort at curing OCD?

STEVE SMITH/SUPERSTOCK

Hand washing is a good idea whether you are an employee or not. But the feeling that one "must wash hands" can come to mind many dozens of times a day in some people with obsessive-compulsive disorder, leading to compulsive washing and even damage to the skin.

Approximately 2.5% of people will develop OCD sometime in their lives, with similar rates across different cultures (Gibbs, 1996; Karno & Golding, 1991; Robins & Regier, 1991). Women tend to be more susceptible than men, but the difference is not large (Karno & Golding, 1991). The most common obsessions involve contamination, aggression, death, sex, disease, orderliness, and disfigurement (Jenike, Baer, & Minichiello, 1986; Rachman & DeSilva, 1978). Compulsions typically take the form of cleaning, checking, repeating, ordering/arranging, and counting (Antony, Downie, & Swinson, 1998). Although compulsive behavior is always excessive, it can vary considerably in intensity and frequency. For example, fear of contamination may lead to 15 minutes of hand washing in some individuals, while others may need to spend hours with disinfectants and extremely hot water, scrubbing their hands until they bleed.

Family studies indicate a moderate genetic heritability for OCD: Identical twins show a higher concordance than do fraternal twins. Relatives of individuals with OCD may not have the disorder themselves, but they are at greater risk for other types of anxiety disorders than are members of the general public (Billet, Richter, & Kennedy, 1998). Researchers have not determined the biological mechanisms that may contribute to OCD, but some evidence implicates heightened neural activity in the caudate nucleus of the basal ganglia (discussed in Chapter 3), a brain region known to be involved in the initiation of intentional actions (Kronig et al., 1999). Drugs that increase the activity of the neurotransmitter serotonin in the brain can inhibit the activity of the caudate nucleus and relieve some of the symptoms of obsessive-compulsive disorder (Hansen et al., 2002). However, this finding does not indicate that overactivity of the caudate nucleus is the cause of OCD. It could also be an effect of the disorder: Patients with OCD often respond favorably to psychotherapy and show a corresponding reduction in activity in the caudate nucleus (Baxter et al., 1992).

panic disorder A disorder characterized by the sudden occurrence of multiple psychological and physiological symptoms that contribute to a feeling of stark terror.

agoraphobia An extreme fear of venturing into public places.

obsessive-compulsive disorder (OCD) A disorder in which repetitive, intrusive thoughts (obsessions) and ritualistic behaviors (compulsions) designed to fend off those thoughts interfere significantly with an individual's functioning.

ONLY HUMAN

YOU NEVER KNOW WHEN YOU MIGHT NEED ONE OF THESE In May 1996, Stanford University won the right over the University of California at Berkeley to house the literary legacy of the late Pulitzer- and Oscar-winning writer William Saroyan, apparently because it also agreed to take custody of Saroyan's nonliterary property. Because Saroyan was a compulsive collector, his nonliterary archives include, among other things, hundreds of boxes of rocks, matchbook covers, old newspapers (numbering in the thousands), labels peeled off cans, and a plastic bag filled with about 10,000 rubber bands.

summary quiz [12.2]

4. Katie experiences intense anxiety and distress whenever she has to interact with unfamiliar people. She probably is suffering from
a. generalized anxiety disorder.
b. social phobia.
c. specific phobia.
d. panic disorder.

5. People develop phobias of certain objects, such as spiders and snakes, much more easily than objects such as flowers or stuffed animals. This fact is best explained by which theory?
a. preparedness
b. classical conditioning
c. observational learning
d. diathesis-stress

6. Agoraphobia often develops in a person who suffers from
a. generalized anxiety disorder.
b. social phobia.
c. obsessive-compulsive disorder.
d. panic disorder.

7. Symptoms of obsessive-compulsive disorder can be relieved by medications that increase the activity of the neurotransmitter
a. GABA.
b. dopamine.
c. serotonin.
d. epinephrine.

Dissociative Disorders: Going to Pieces

Mary, a 35-year-old social worker being treated with hypnosis for chronic pain in her forearm, mentioned to her doctor that she often found her car low on fuel in the morning despite her having filled it with gas the day before. Overnight the odometer would gain 50 to 100 miles, even though she had no memory of driving the car. During one hypnotic session, Mary suddenly blurted out in a strange voice, "It's about time you knew about me." In the new voice, she identified herself as "Marian" and described the drives that she took at night, which were retreats to the nearby hills to "work out problems." Mary knew nothing of "Marian" and her nighttime adventures. Marian was as abrupt and hostile as Mary was compliant and caring. In the course of therapy, six other personalities emerged—including one who claimed to be a 6-year-old child (Spitzer et al., 1994).

Mary suffers from a type of **dissociative disorder,** *a condition in which normal cognitive processes are severely disjointed and fragmented, creating significant disruptions in memory, awareness, or personality that can vary in length from a matter of minutes to many years.* To some extent, a bit of dissociation, or "splitting," of cognitive processes is normal. For example, research on implicit memory shows that we often retain and are influenced by information that we do not consciously remember (discussed in Chapter 5). Moreover, we can engage in more than one activity or mental process while maintaining only dim awareness of the perceptions and decisions that guide other behaviors (such as talking while driving a car). Our ordinary continuity of memory and awareness of our personal identity contrasts with Mary's profound cognitive fragmentation and blindness to her own mental processes and states.

dissociative disorder A condition in which normal cognitive processes are severely disjointed and fragmented, creating significant disruptions in memory, awareness, or personality that can vary in length from a matter of minutes to many years.

dissociative identity disorder (DID) The presence within an individual of two or more distinct identities that at different times take control of the individual's behavior.

dissociative fugue The sudden loss of memory for one's personal history, accompanied by an abrupt departure from home and the assumption of a new identity.

dissociative amnesia The sudden loss of memory for significant personal information.

Dissociative Identity Disorder

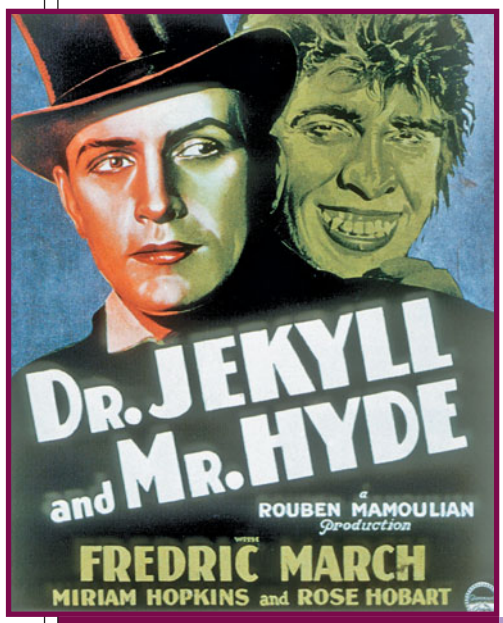
Dissociative identity disorder (DID) is characterized by *the presence within an individual of two or more distinct identities that at different times take control of the individual's behavior.* (The disorder was once called "multiple personality disorder.") When the original

personality, or host personality, is dominant, the individual often is unaware of the alternate personalities or "alters" (as in Mary's case). However, the alters typically know about the host personality and about each other. The number of distinct identities can range considerably, with some cases numbering more than 100. Sometimes alters share certain characteristics; sometimes they are dissimilar—assuming different vocal patterns, dialects, ages, morals, and even gender identities.

Prior to 1970, DID was considered rare, with only about 100 cases reported in the professional literature worldwide. However, since that time, the number of reported cases has grown enormously. Recent estimates are that between 0.5% and 1% of the general population suffers from the disorder, with a female-to-male prevalence of about 9 to 1 (Maldonado & Butler, 1998). Most patients are diagnosed when they are in their 20s or 30s, although the actual age of onset is probably during childhood (Maldonado & Butler, 1998; Putnam et al., 1986). The strange transition of DID—from a rare disorder to a minor epidemic—has raised concerns that the disorder is a matter of faking or fashion (Spanos, 1994). The most common explanation targets psychotherapists who, though often well meaning, are said to have created the disorder in patients who are vulnerable to their suggestive procedures. Accounts of how therapists treat DID, often using hypnosis, have revealed some cajoling and coaxing of clients into reporting evidence of alternate personalities (Acocella, 1999).

● What accounts for the increase in DID diagnoses?

Most patients with DID report a history of severe childhood abuse and trauma (Coons, 1994; Putnam et al., 1986), and that evidence supports a popular explanation rooted in psychodynamic theory. From this viewpoint, the helpless child, confronted with intolerable abuse and trauma, responds with the primitive psychological defense of splitting or dissociating to escape the pain and horror. Because the child cannot escape the situation, she essentially escapes from herself. Once the dissociation takes hold, it can set into motion a psychological process that may lead to the development of multiple identities (Kluft, 1984, 1991). Critics of the psychodynamic explanation of DID note that, in most cases, the determination of childhood trauma is based on self-reported memories, which can be susceptible to errors and distortions (Dorahy, 2001). Furthermore, early abuse and trauma are especially prevalent in low-income households, while cases of multiple personality occur almost exclusively among people of middle income (Acocella, 1999). In short, dissociative identity disorder is poorly understood and deep questions exist about what it is, how it arises, and how it can be treated.



PARAMOUNT PICTURES/PHOTOFEST

Robert Louis Stevenson's 1886 portrayal of dissociative disorder has become so well known that "Jekyll and Hyde" is popular as a synonym for a radically changing personality. This poster is from a 1931 film version.

Dissociative Amnesia and Dissociative Fugue

"Burt," a 42-year-old short-order cook in a small town, came to the attention of police when he got into a heated altercation with another man in the diner. When the police took Burt to the hospital, they discovered that he had no identification documents, and he claimed that he couldn't remember his name, his address, or any other personal information. Eventually, the police matched his description to that of Gene Saunders, a resident of a city 200 miles away, who had disappeared a month earlier. When Gene Saunders's wife came to identify him, he denied knowing her and his real identity. Before he disappeared, Gene Saunders had been experiencing considerable difficulties at home and at work and had become withdrawn and irritable. Two days before he left, he had a violent argument with his 18-year-old son, who accused him of being a failure (Spitzer et al., 1994, pp. 254–255).

Burt's case is an example of **dissociative fugue**, which involves *the sudden loss of memory for one's personal history, accompanied by an abrupt departure from home and the assumption of a new identity.* A related, but less severe, condition is **dissociative amnesia**, *the sudden loss of memory for significant personal information*. Whereas patients with dissociative fugue lose their whole identity, patients with dissociative amnesia retain their identity but lose memories for a period that typically spans a specific event or period of time but can involve extended periods (months or years) of a person's life (Kihlstrom, 2005).

AP PHOTO/THE DENVER POST, KARL GEHRING

Call me "Al." A man identified only by the name "Al" gave a news conference in Denver in 2006 in hopes that someone might be able to tell him more about himself. A victim of a dissociative fugue state, he had no memory of his identity or his life. His fiancée recognized him on TV and confirmed his identity as Jeffrey Alan Ingram, an unemployed machinist from Olympia, Washington.

Both dissociative amnesia and dissociative fugue rarely occur before adulthood or after the age of 50 (Sackeim & Devanand, 1991). In both conditions, the memory loss is too extensive, and the information forgotten too vital, to be the result of normal forgetting. Dissociative fugue states may last for a few hours or for years; they usually end rather abruptly, and victims typically recover their memories and personal identities. Dissociative amnesia may also be temporary: People have lost significant personal memories and then recovered them later (Brenneis, 2000; Schooler, Bendiksen, & Ambadar, 1997).

How do dissociative fugue and dissociative amnesia differ from other kinds of memory impairments?

Both dissociative fugue and dissociative amnesia differ from other kinds of memory impairments—such as the anterograde amnesia you read about in Chapter 5—in that they cannot be attributed to brain injury, drug use, or another mental disorder. The underlying causes of dissociative fugue and dissociative amnesia remain a mystery, although episodes may be triggered by stressful life circumstances.

summary quiz [12.3]

8. Pat was involved in a severe auto accident and is unable to recall the event. Pat is displaying
a. dissociative amnesia.
b. dissociative fugue.
c. dissociative identity disorder.
d. split personality.

9. Alex woke up one morning in a motel. He could not recall his name or anything about his past life. Alex was showing the symptoms of
a. dissociative amnesia.
b. dissociative fugue.
c. dissociative identity disorder.
d. split personality.

10. Which is an accurate statement about dissociative identity disorder?
a. It is much less common today than it was prior to 1970.
b. It occurs almost exclusively among people in low-income households.
c. Most patients with the disorder report a history of severe childhood abuse and trauma.
d. The original or "host" personality usually is aware of the alters.

mood disorders Mental disorders that have mood disturbance as their predominant feature.

major depressive disorder A disorder characterized by a severely depressed mood that lasts 2 weeks or more and is accompanied by feelings of worthlessness and lack of pleasure, lethargy, and sleep and appetite disturbances.

dysthymia A disorder that involves the same symptoms as in depression only less severe, but the symptoms last longer, persisting for at least 2 years.

double depression A moderately depressed mood that persists for at least 2 years and is punctuated by periods of major depression.

seasonal affective disorder (SAD) Depression that involves recurrent depressive episodes in a seasonal pattern.

Mood Disorders: At the Mercy of Emotions

You're probably in a mood right now. Maybe you're happy that it's almost time to get a snack or saddened by something you heard on the radio—or you may feel good or bad without having a clue why. As you learned in Chapter 9, moods are relatively long-lasting, nonspecific emotional states—and *nonspecific* means we often may have no idea what has caused a mood. Changing moods lend variety to our experiences, like different-colored lights shining on the stage as we play out our lives. However, for people with mood disorders, moods can become so intense that they are pulled or pushed into life-threatening actions. **Mood disorders**—*mental disorders that have mood disturbance as their predominant feature*—take two main forms: depressive disorders and bipolar disorder.

Depressive Disorders

Most people occasionally feel depressed, pessimistic, and unmotivated. But these periods are relatively short-lived and mild. Depression is much more than such sadness. The experience of R. A., a 58-year-old man who visited his primary care physician for

BRIDGEMAN ART LIBRARY

The Blue Devils. *George Cruikshank (1806–1877) portrays a depressed man tormented by demons offering him methods of suicide, appearing as bill collectors, and making a funeral procession.*

treatment of his diabetes, is fairly typical. During the visit, he mentioned difficulties falling asleep and staying asleep that left him chronically fatigued. He complained that over the past 6 months, he'd stopped exercising and gained 12 pounds and had lost interest in socializing. Nothing he normally enjoyed, including sexual activity, could give him pleasure anymore; he had trouble concentrating and was forgetful, irritable, impatient, and frustrated (Lustman, Caudle, & Clouse, 2002). R. A.'s sense of hopelessness and weariness and his lack of normal pleasures goes far beyond normal sadness; it is also different from the normal responses of sorrow and grief that accompany a tragic situation such as the death of a loved one (Bowlby, 1980). Instead, depressive mood disorders are dysfunctional, chronic, and fall outside the range of socially or culturally expected responses.

What is the difference between depression and sadness?

Major depression, also known as unipolar depression, is characterized by *a severely depressed mood that lasts 2 or more weeks and is accompanied by feelings of worthlessness and lack of pleasure, lethargy, and sleep and appetite disturbances*. The bodily symptoms in major depression may seem contrary—sleeping too much or sleeping very little, for example, or overeating or failing to eat. Great sadness or despair is not always present, although intrusive thoughts of failure or ending one's life are not uncommon. **Dysthymia** is a related condition in which *the same cognitive and bodily problems as in depression are present, but they are less severe and last longer—persisting for at least 2 years*. Patients who suffer from dysthymia punctuated by periods of major depression are said to have **double depression.** Another variant, **seasonal affective disorder (SAD),** involves *recurrent depressive episodes in a seasonal pattern*; usually, the episodes begin in fall or winter and remit in spring, although recurrent summer depressive episodes are not unknown.

On average, an episode of major depression lasts about 6 months (Beck, 1967; Robins & Guze, 1972). However, without treatment, approximately 80% of individuals will experience at least one recurrence of the disorder (Judd, 1997; Mueller et al., 1999). Compared with people who have a single episode, individuals with recurrent depression have more severe symptoms, higher rates of depression in their families, more suicide attempts, and higher rates of divorce (Merikangas, Wicki, & Angst, 1994). The median lifetime risk for depression of about 16% seems to be increasing in younger generations (Lavori et al., 1987; Wittchen, Knauper, & Kessler, 1994). For example, a large international

A time for seasonal affective disorder. When the sun goes away, sadness can play.

IAN SANDERSON/GETTY IMAGES

DESIREE NAVARRO/GETTY IMAGES

Actress Brooke Shields experienced severe postpartum depression and wrote a book about it.

study found evidence of a substantial global increase in the risk for depression across the past century (Cross-National Collaborative Research Group, 1992).

This situation is especially dire for women because they are diagnosed with depression at a rate twice that of men (Kessler et al., 1996; Lavori et al., 1987; Robins et al., 1984; Wittchen et al., 1994). Socioeconomic standing has been invoked as an explanation for women's heightened risk: Their incomes are lower than those of men, and poverty could cause depression. Sex differences in hormones are another possibility: Estrogen, androgen, and progesterone influence depression; some women experience *postpartum depression* (depression following childbirth) due to changing hormone balances. It is also possible that the higher rate of depression in women reflects greater willingness by women to face their depression and seek out help, leading to higher rates of diagnosis.

What are some reasons more women than men experience depression?

A number of factors probably contribute to development of depression. One factor is genetics. Heritability estimates for major depression typically range from 33% to 45% (Plomin et al., 1997; Wallace, Schnieder, & McGuffin, 2002), and heritability is probably much higher for "severe" major depression (defined as three or more episodes) than for "less severe" major depression (defined as one or two episodes) (Bertelsen, Harvald, & Hauge, 1977; Katz & McGuffin, 1993; Plomin et al., 1997; Roth & Mountjoy, 1997).

Biological factors also play a role. Drugs that increase levels of the neurotransmitters norepinephrine and serotonin can sometimes reduce depression, which might suggest that depression may be caused by a depletion of these neurotransmitters. But some studies have found *increases* in norepinephrine activity among depressed patients (Thase & Howland, 1995). Moreover, even though the antidepressant medications change neurochemical transmission in less than a day, they typically take at least 2 weeks to relieve depressive symptoms. So biochemistry cannot be the whole story. Brain abnormalities may also play a role. Individuals with major depression often show diminished activity in the left prefrontal cortex and increased activity in the right prefrontal cortex (see **FIGURE 12.2**)—areas of the brain involved in the processing of emotions (Davidson, 2004; Davidson et al., 2002). But again, the story is complicated. These abnormal activity patterns may be effects of the mood disturbance, or they may cause people to be more susceptible to depression in the face of stress or trauma.

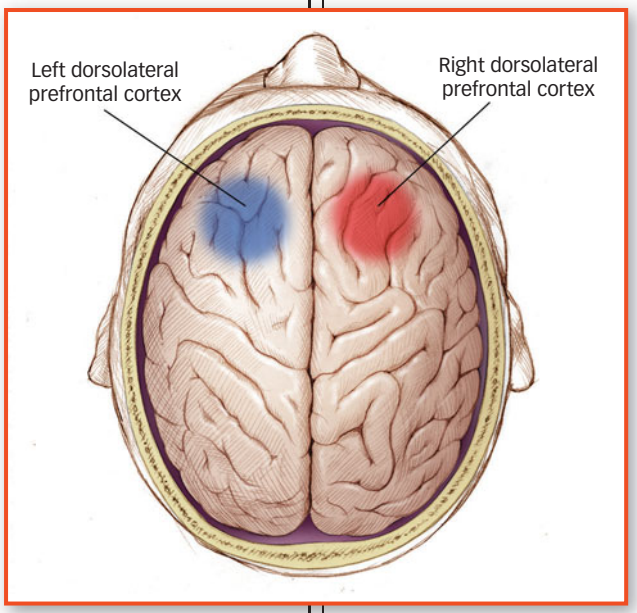


FIGURE 12.2
Brain and Depression *Reduced activation in the left dorsolateral prefrontal cortex (blue) and increased activation in the right dorsolateral prefrontal cortex (red) have been found to be linked with depression in several studies.*

Psychological factors may also predispose individuals to develop depression. One of the first theorists to emphasize the role of thought in depression, Aaron Beck (1967), noted that his depressed patients distorted perceptions of their experiences and embraced dysfunctional attitudes that promoted and maintained negative mood states. Elaborating on this idea, **helplessness theory** maintains that *individuals who are prone to depression automatically attribute negative experiences to causes that are internal* (*i.e., their own fault*), *stable* (*i.e., unlikely to change*), *and global* (*i.e., widespread*) (Abramson, Seligman, & Teasdale, 1978). For example, a student at risk for depression might view a bad grade on a math test as a sign of low intelligence (internal) that will never change (stable) and that will lead to failure in all his or her future endeavors (global). In contrast, a student without this tendency might have the opposite response, attributing the grade to something external (poor teaching), unstable (a missed study session), and/or specific (boring subject).

What is helplessness theory?

Under normal conditions, individuals at risk for depression may work hard to suppress such thoughts that threaten their emotional well-being. But when cognitive demands arise (time pressures, distraction, stress, etc.), individuals who are at risk for depression often display heightened levels of negative thinking (Wenzlaff &

Bates, 1998; Wenzlaff & Eisenberg, 2001). They may worry about failures, think that people are avoiding them, or wonder whether anything is worthwhile. This breakdown in mental control may explain why stressful life events such as a prolonged illness or the loss of a loved one often precede a descent into depression (Kessler, 1997). Ironically, thought suppression itself may intensify depressive thoughts and ultimately contribute to relapse (Rude et al., 2002; Wenzlaff, 2005; Wenzlaff & Bates, 1998; see the Real World box on the next page).

Man Ray (1890–1976) offered a caricature of sadness as art in Tears, *1930–1932.*

Bipolar Disorder

If depression is bad, would the opposite be better? Not for Julie, a 20-year-old college sophomore. When first seen by a clinician, Julie had gone 5 days without sleep and was extremely active and expressing bizarre thoughts and ideas. She proclaimed to friends that she did not menstruate because she was "of a third sex, a gender above the two human sexes," that she had switched souls with a senator from her state, and that she was capable of saving the world from nuclear destruction (Vitkus, 1999). Julie's periods of abnormally high mood and activity would alternate with periods of crushing depression.

The diagnostic label for this constellation of symptoms is **bipolar disorder**—*an unstable emotional condition characterized by cycles of abnormal, persistent high mood* (*mania*) *and low mood* (*depression*). In about two thirds of patients, manic episodes immediately precede or immediately follow depressive episodes (Whybrow, 1997). The depressive phase of bipolar disorder is often clinically indistinguishable from major depression (Perris, 1992). In the manic phase, which must last at least a week to meet *DSM-IV-TR* requirements, mood can be elevated, expansive, or irritable. Other prominent symptoms of the manic phase include grandiosity, decreased need for sleep, talkativeness, racing thoughts, distractibility, and reckless behavior (e.g., compulsive gambling, sexual indiscretions, and unrestrained spending sprees). Psychotic features such as hallucinations (erroneous perceptions) and delusions (erroneous beliefs) may be present, and so the disorder can be misdiagnosed as schizophrenia.

helplessness theory The idea that individuals who are prone to depression automatically attribute negative experiences to causes that are internal (i.e., their own fault), stable (i.e., unlikely to change), and global (i.e., widespread).

bipolar disorder An unstable emotional condition characterized by cycles of abnormal, persistent high mood (mania) and low mood (depression).

The lifetime risk for bipolar disorder is about 1.3% for both men and women (Wittchen et al., 1994). Bipolar disorder is typically a recurrent condition, with approximately 90% of afflicted people suffering from several episodes over a lifetime (Coryell et al., 1995). About 10% of cases have *rapid cycling bipolar disorder,* characterized by at least four mood episodes (either manic or depressive) every year. Rapid cycling is more common in women than in men and is sometimes precipitated by taking certain kinds of antidepressant drugs (Liebenluft, 1996; Whybrow, 1997). Unfortunately, bipolar disorder tends to be persistent. In one study, 24% of patients had relapsed within 6 months of recovery from an episode, and 77% had at least one new episode within 4 years of recovery (Coryell et al., 1995).

PHOTODISC

Winston Churchill made a pet of his bipolar illness, calling his depression the "black dog" that followed him around.

Among the various mental disorders, bipolar disorder has the highest rate of heritability, with concordance as high as 80% for identical twins and 16% for fraternal twins (Bertelsen et al., 1977). Close relatives of an individual with bipolar disorder are also at heightened risk for unipolar depression (Bertelsen et al., 1977)—a finding that raises the possibility that the genetic transmission of bipolar disorder is connected to the genetic transmission of unipolar depression. Thus, bipolar disorder may be *polygenic,* arising from the action of many genes in an additive or interactive fashion.

Biochemical imbalances may be involved in bipolar disorder, but specific neurotransmitters have not been identified. Some researchers have suggested that low levels of serotonin and norepinephrine may

[THE REAL WORLD]

Suicide Risk and Prevention

Overall, suicide is the 11th leading cause of death in the United States and the third most common form of death among high school and college students (King, 1997). In 2000, 10.6 out of 100,000 Americans died by suicide—a total of 29,350 in the nation that year (National Institute of Mental Health, 2003). Although people have various reasons for taking their own lives, approximately 50% kill themselves during the recovery phase of a depressive episode (Isacsson & Rich, 1997). The lifetime risk of suicide in people with mood disorders is about 4%, compared to a risk of only 0.5% in the general population (Bostwick & Pankratz, 2000). In the United States, women attempt suicide about three to four times more often than men. However, because men typically use more lethal methods than do women (e.g., guns versus pills), men are three to four times more likely to actually kill themselves than are women (Canetto & Lester, 1995). The tragic effects of suicide extend beyond the loss of life, compounding the grief of families and loved ones who must contend with feelings of abandonment, guilt, shame, and futility.

Researchers have identified a variety of motives for suicide, including a profound sense of alienation, intolerable psychological or physical suffering or both, hopelessness, an escape from feelings of worthlessness, and a desperate cry for help (Baumeister & Tice, 1990; Durkheim, 1951; Joiner, 2006). Studies show an increased risk of suicide among family members with a relative who committed suicide (Kety, 1990; Mann et al., 1999). This elevated risk may be a function of biological factors in depression, or suicide could be contagious, with exposure making it a more salient option during desperate times. Contagious effects are suggested by the occasional "clusters" of suicides in which several people—usually teenagers—attempt to kill themselves following a highly publicized case (Gould, 1990). In fact, suicide in the United States has been found to increase after nationally televised news or feature stories about suicide (Phillips & Carstensen, 1986).

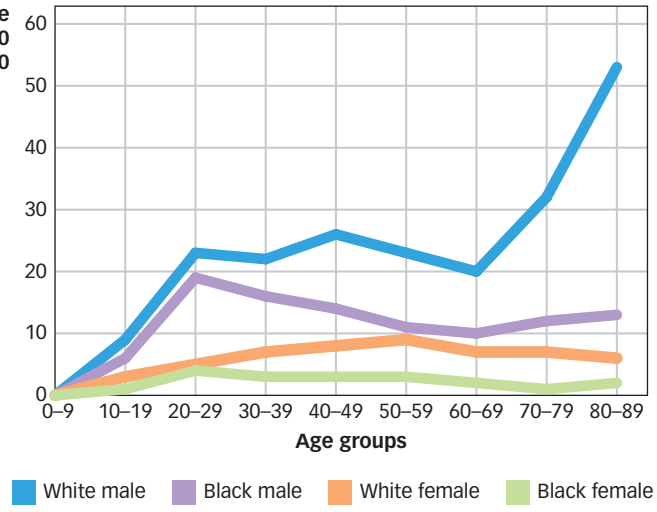
How can you tell if someone is at risk for suicide? Unfortunately, definitive prediction is impossible, but a variety of warning signs can suggest an increased risk (Substance Abuse and Mental Health Services Administration, 2005). Any one sign is a cause for concern, and the risk is especially serious when several occur together.

DAVID SANGER PHOTOGRAPHY/ALAMY

Over 1,218 people have jumped from the Golden Gate Bridge since its completion in 1937, a jump 98% likely to be fatal. The city of San Francisco continues to debate whether to install a suicide barrier (Guthmann, 2005).

- Talk about suicide. About 90% of people who are suicidal discuss their intentions, so this obvious warning sign should not be dismissed as simply a means of getting attention. Although most people who threaten suicide do not actually attempt it, they are at greater risk than those who do not talk about it.
- An upturn in mood following a prolonged depressive episode. Surprisingly, suicide risk increases at this point. In fact, a sudden lifting of mood may reflect relief at the prospect that suicide will end the emotional suffering.
- A failed love interest or loss of a loved one through separation or death.
- A severe, stressful event that is especially shameful or humiliating.
- A family history of suicide.
- Unusual reckless or risky behavior, seemingly carried out without thinking.
- An unexplained decline in school or workplace performance.
- Withdrawal from friends, family, and regular activities.
- Expressing feelings of being trapped, as though there's "no way out."
- "Cleaning house" by giving away prized possessions.
- Increased alcohol or drug use. Substance abuse is associated with approximately 25% to 50% of suicides and is especially associated with adolescent suicides (Conwell et al., 1996; Woods et al., 1997).

Anyone who is potentially suicidal should be encouraged to seek professional help. Colleges and universities have student counseling centers, and most cities have suicide prevention centers with 24-hour hotlines and walk-in emergency counseling. The U.S. National Suicide Prevention Lifeline is 1-800-273-TALK.



The U.S. suicide rates reveal that men are more likely to commit suicide than women at all ages, that men's likelihood of suicide grows in early adulthood, and that white men remain most suicide prone throughout life with a spike in the later years. (From National Institute of Mental Health, 2003.)

contribute to the emotional roller coaster that characterizes bipolar disorder (Whybrow, 1997). This notion is not well substantiated and doesn't explain why lithium, a chemical unrelated to these neurotransmitters, often helps stabilize both the depressive and manic symptoms associated with bipolar disorder (see Chapter 14). Psychological factors may also contribute. Stressful life experiences often precede manic and depressive episodes (Ellicot et al., 1990; Hammen, 1995). One study found that severely stressed patients took an average of three times longer to recover from an episode than did patients not affected by stress (Johnson & Miller, 1997). Personality characteristics such as neuroticism and conscientiousness have also been found to predict increases in bipolar symptoms over time (Lozano & Johnson, 2001). Finally, patients living with family members who are hostile toward or critical of the patient are more likely to relapse than patients with supportive families (Miklowitz et al., 1988). These data are consistent with a stress-diathesis model, in which environmental stressors can trigger the disorder in persons with preexisting vulnerability.

● **How does stress relate to manic depressive episodes?**

summary quiz [12.4]

11. Major depression is characterized by _____, whereas bipolar disorder is characterized by _____.
- a. mania only; alternating periods of mania and depression
- b. alternating periods of mania and depression; mania and depression occurring at the same time
- c. depression only; alternating periods of mania and depression
- d. alternating periods of mania and depression; depression only

12. The condition in which the same cognitive and bodily problems as in depression are present, but are less severe and last longer, is called
- a. dysthymia.
- b. double depression.
- c. seasonal affective disorder.
- d. bipolar disorder.

13. Which is true of depression in women and men?
- a. Men are twice as likely as women to be diagnosed with depression.
- b. Women are twice as likely as men to be diagnosed with depression.
- c. Among young adults, women are more depressed than men; among older adults, men are more depressed than women.
- d. Women and men are equally likely to be diagnosed with depression.

14. Which of the following is true regarding factors associated with mood disorders?
- a. People with mood disorders show abnormally high levels of norepinephrine and serotonin.
- b. People who attribute their failures to external and unstable causes are more prone to depression.
- c. People with major depression often show increased activity in the left frontal cortex and diminished activity in the right prefrontal cortex.
- d. Close relatives of individuals with mood disorders have a heightened risk for developing mood disorders themselves, indicating that heredity plays a role.

schizophrenia A disorder characterized by the profound disruption of basic psychological processes; a distorted perception of reality; altered or blunted emotion; and disturbances in thought, motivation, and behavior.

delusion A patently false belief system, often bizarre and grandiose, that is maintained in spite of its irrationality.

hallucination A false perceptual experience that has a compelling sense of being real despite the absence of external stimulation.

Schizophrenia: Losing the Grasp on Reality

In the opening vignette of this chapter, you read about Margaret, the woman who believed God was punishing her and who saw evidence of this punishment in everyday events: reading arcane meanings into the way objects were positioned in the sink and the programs that were playing on the television. Margaret suffered from **schizophrenia**, a psychological disorder characterized by *the profound disruption of basic psychological processes; a distorted perception of reality; altered or blunted emotion;, and disturbances in thought, motivation, and behavior.* Traditionally, schizophrenia was regarded primarily as a disturbance of thought and perception, in which the sense of reality becomes severely distorted and confused. However, this condition is now understood to take different forms affecting a wide range of functions.

What is schizophrenia?

Symptoms and Types of Schizophrenia

According to the *DSM-IV-TR,* schizophrenia is diagnosed when two or more of the following symptoms emerge during a continuous period of at least 1 month with signs of the disorder persisting for at least 6 months: *delusion, hallucination, disorganized speech, grossly disorganized behavior* or *catatonic behavior,* and *negative symptoms*. Let's consider each symptom in detail.

- **Delusion** is *a patently false belief system, often bizarre and grandiose, that is maintained in spite of its irrationality.* For example, an individual with schizophrenia may believe that he or she is Jesus Christ, Napoleon, Joan of Arc, or some other famous person. Delusions of persecution are also common, such as believing that the CIA, demons, extraterrestrials, or other malevolent forces are conspiring to harm or control the patient. People with schizophrenia have little or no insight into their disordered perceptual and thought processes. Because they cannot understand that they have lost control of their own minds, delusions that attribute control to external agents (e.g., demons or the CIA) may represent the patients' attempts to make sense of the tormenting delusions (Roberts, 1991).
- **Hallucination** is *a false perceptual experience that has a compelling sense of being real despite the absence of external stimulation.* The perceptual disturbances associated with schizophrenia can include hearing, seeing, or smelling things that are not there or having tactile sensations in the absence of relevant sensory stimulation. Among people with schizophrenia, some 65% report hearing voices (Frith & Fletcher, 1995),

ELIZABETH AUTUMN DANIELS/THE SURVIVOR ART GALLERY

The Clown Voice, *2003. Artist Elizabeth Autumn Daniels writes, "When I was about 17, I started hallucinating and thinking people were out to get me. . . . I thought that people were going to bomb my house. I was hearing 10 voices in my head nonstop. . . . Turns out I am paranoid schizophrenic. . . . But finally the past couple of months I have found the right medication. . . . I have been drawing and painting since I was 5 years old. . . . And now it is helping me heal. I drew this because the clown is what I saw when I heard one of the voices in my head."*

sometimes scolding or commanding or ridiculing. One patient reported a voice saying, "He's getting up now. He's going to wash. It's about time" (Frith & Fletcher, 1995). British psychiatrist Henry Maudsley (1886) long ago proposed that these voices are in fact produced in the mind of the schizophrenic individual, and recent research substantiates his idea. In one PET imaging study, auditory hallucinations were accompanied by activation in Broca's area—the part of the brain (as discussed in Chapters 3 and 7) associated with the production of language (McGuire, Shah, & Murray, 1993).

- **Disorganized speech** is *a severe disruption of verbal communication in which ideas shift rapidly and incoherently from one to another unrelated topic*. The abnormal speech patterns in schizophrenia reflect difficulties in organizing thoughts and focusing attention. Responses to questions are often irrelevant, ideas are loosely associated, and words are used in peculiar ways. For example, asked by her doctor, "Can you tell me the name of this place?" one patient with schizophrenia responded, "I have not been a drinker for 16 years. I am taking a mental rest after a 'carter' assignment of 'quill.' You know, a 'penwrap.' I had contracts with Warner Brothers Studios and Eugene broke phonograph records but Mike protested. I have been with the police department for 35 years. I am made of flesh and blood—see, Doctor" [pulling up dress] (Carson et al., 2000, p. 474).
- **Grossly disorganized behavior** is *behavior that is inappropriate for the situation or ineffective in attaining goals, often with specific motor disturbances*. A patient might exhibit constant childlike silliness, improper sexual behavior (e.g., masturbating in public), disheveled appearance, or loud shouting or swearing. Specific motor disturbances might include strange movements, rigid posturing, odd mannerisms, bizarre grimacing, or hyperactivity. Some patients show **catatonic behavior**, *a marked decrease in all movement or an increase in muscular rigidity and overactivity.* These patients may actively resist movement (when someone is trying to move them) or become completely unresponsive and unaware of their surroundings.
- **Negative symptoms** of schizophrenia include *emotional and social withdrawal; apathy; poverty of speech; and other indications of the absence or insufficiency of normal behavior, motivation, and emotion*. These negative symptoms refer to things missing in people with schizophrenia; in contrast, the other symptoms (e.g., hallucinations and delusions) are called "positive symptoms," because they appear more in people with schizophrenia than in other people.

GRUNNITUS STUDIO/PHOTO RESEARCHERS

A patient suffering from catatonic schizophrenia may assume an unusual posture and fail to move for hours.

What are the characteristics of schizophrenia?

The various symptoms of schizophrenia do not all occur in every case. Recent editions of the DSM have identified five subtypes of schizophrenia (see **TABLE 12.2** on page 386). Three of these types—paranoid, catatonic, and disorganized—depend primarily on the relative prominence of various symptoms. The paranoid type involves preoccupation with delusions and hallucinations; the catatonic type involves immobility and stupor or agitated, purposeless motor activity; the disorganized type is often the most severe, featuring disorganized speech and behavior and flat or inappropriate emotion. The *DSM-IV-TR* reserves the undifferentiated type for cases that do not neatly fall into these three categories and the residual type for individuals who have substantially recovered from at least one schizophrenic episode but still have lingering symptoms.

Schizophrenia occurs in about 1% of the population and is about equally common in men and women (Gottesman, 1991; Jablensky, 1997). The first episode typically occurs during late adolescence or early adulthood (Gottesman, 1991), although females usually have a later onset than do males (Iacono & Beiser, 1992; Marcus et al., 1993). Despite its relatively low frequency, schizophrenia is the primary diagnosis for nearly 40% of all admissions to state and county mental hospitals; it is the second most frequent diagnosis for inpatient psychiatric admission at other types of institutions (Rosenstein, Milazzo-Sayre, & Manderscheid, 1990). The disproportionate rate of hospitalization for schizophrenia is a testament to the devastation it causes in people's lives.

disorganized speech A severe disruption of verbal communication in which ideas shift rapidly and incoherently from one to another unrelated topic.

grossly disorganized behavior Behavior that is inappropriate for the situation or ineffective in attaining goals, often with specific motor disturbances.

catatonic behavior A marked decrease in all movement or an increase in muscular rigidity and overactivity.

negative symptoms Emotional and social withdrawal; apathy; poverty of speech; and other indications of the absence or insufficiency of normal behavior, motivation, and emotion.

TABLE 12.2

Types of Schizophrenia

Types	Characteristics
Paranoid type	Symptoms dominated by absurd, illogical, and changeable delusions, frequently accompanied by vivid hallucinations, with a resulting impairment of critical judgment and erratic, unpredictable, and occasionally dangerous behaviors. In chronic cases, there is usually less disorganization of behavior than in other types of schizophrenia and less extreme withdrawal from social interaction.
Catatonic type	Often characterized by alternating periods of extreme withdrawal and extreme excitement, although in some cases one or the other reaction predominates. In the withdrawal reaction, there is a sudden loss of all animation and a tendency to remain motionless for hours or even days in a single position. The person may undergo an abrupt change, with excitement coming on suddenly; the person may talk or shout incoherently, pace rapidly, and engage in uninhibited, impulsive, and frenzied behavior. In this state, an individual may be dangerous.
Disorganized type	Usually occurs at an earlier age than most other types of schizophrenia and represents a more severe disintegration of the personality. Emotional distortion and blunting typically are manifested in inappropriate laughter and silliness, peculiar mannerisms, and bizarre, often obscene behavior.
Undifferentiated type	A pattern of symptoms in which there is a rapidly changing mixture of all or most of the primary indicators of schizophrenia. Commonly observed are indications of perplexity, confusion, emotional turmoil, delusions, excitement, dreamlike autism, depression, and fear. Most often this picture is seen in patients who are in the process of breaking down and developing schizophrenia. It is also seen, however, when major adjustment demands impinge on a person with an already-established schizophrenic psychosis. In such cases, it frequently foreshadows an impending change to another primary schizophrenic subtype.
Residual type	Mild indication of schizophrenia shown by individuals in remission following a schizophrenic episode.

Biological and Psychological Factors Associated with Schizophrenia

Although schizophrenia is a dizzyingly complex disorder, many biological factors have been identified that contribute to the disease. Genetics play a key role. Family studies indicate that the closer a person's genetic relatedness to a person with schizophrenia, the greater the likelihood of developing the disorder (Gottesman, 1991). As shown in **FIGURE 12.3** (on page 387), concordance rates increase dramatically with biological relatedness. The rates are estimates and vary considerably from study to study, but almost every study finds the average concordance rates higher for identical twins (48%) than for fraternal twins (17%), which suggests a genetic component for the disorder (Torrey et al., 1994).

Identical twins may share more than their genes. Considerable evidence suggests that the prenatal and perinatal environments may also affect concordance rates in identical twins (Jurewicz, Owen, & O'Donovan, 2001; Thaker, 2002; Torrey et al., 1994). For example, because approximately 70% of identical twins share the same prenatal blood supply, toxins in the mother's blood could contribute to the high concordance rate. When one twin develops schizophrenia and the other twin does not, birth records often show that the afflicted twin is second born and had a lower birth weight (Wahl, 1976). In addition, people with late winter or early spring birth dates have about a 20% greater risk of schizophrenia than do those born in late summer or early fall (DeLisi, Crow, & Hirsch, 1986), raising the possibility that viral exposure during a

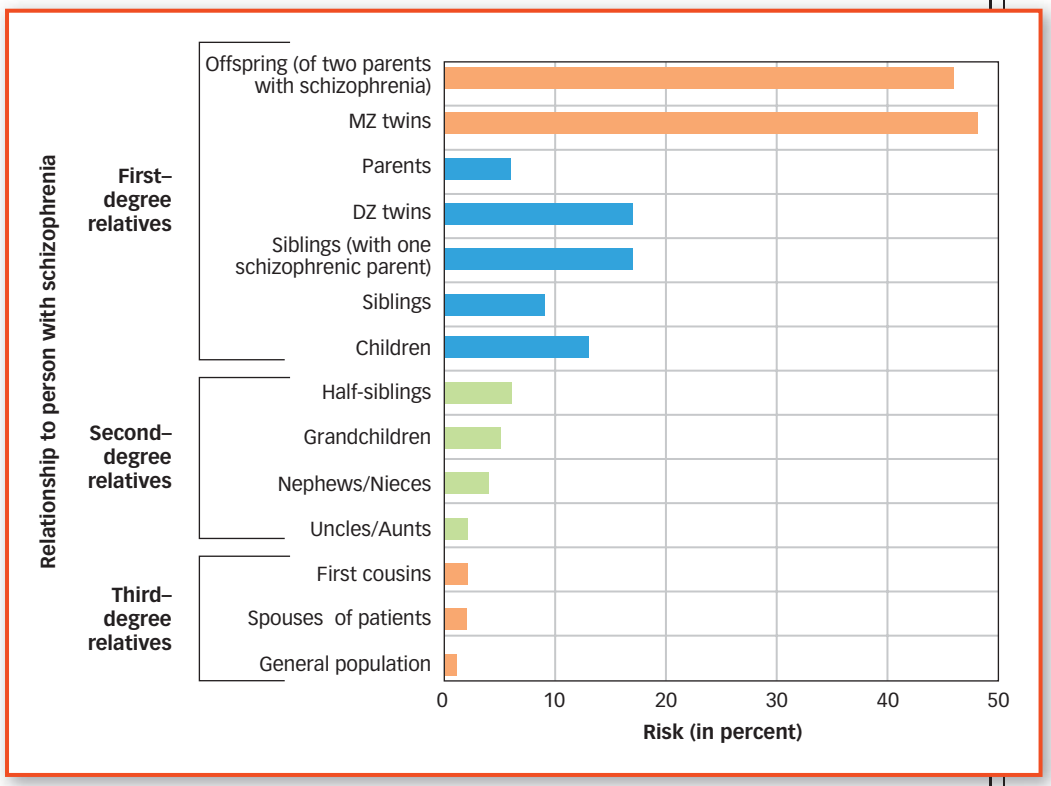


FIGURE 12.3
Average Risk of Developing Schizophrenia *The risk of schizophrenia among biological relatives is greater for those with greater degrees of relatedness. An identical (MZ) twin of a twin with schizophrenia has a 48% risk of developing schizophrenia, for example, and offspring of two parents with schizophrenia have a 46% risk of developing the disorder. (Adapted from Gottesman, 1991.)*

critical period for brain development may contribute to the risk of schizophrenia (Rothermundt, Arolt, & Bayer, 2001). Further support for this idea comes from studies showing that maternal influenza in the second trimester of pregnancy is associated with an increased risk of schizophrenia (Wright et al., 1995).

As with other psychological disorders, biochemical factors may play a role in schizophrenia. During the 1950s, major tranquilizers were discovered that could reduce the symptoms of schizophrenia by lowering levels of the neurotransmitter dopamine. This finding suggested the **dopamine hypothesis**, the *idea that schizophrenia involves an excess of dopamine activity.* The hypothesis is attractive, but considerable evidence suggests that things are not quite so simple (Csermansky & Grace, 1998; Grace & Moore, 1998). For example, many individuals with schizophrenia do not respond favorably to dopamine-blocking drugs (e.g., major tranquilizers), and those who do seldom show a complete remission of symptoms. Moreover, the drugs block dopamine receptors very rapidly, yet individuals with schizophrenia typically do not show a beneficial response for weeks. Finally, research has implicated other neurotransmitters in schizophrenia, suggesting that the disorder may involve a complex interaction among a host of different biochemicals (Benes, 1998; Lewis et al., 1999; Sawa & Snyder, 2002). In sum, the precise role of neurotransmitters in schizophrenia has yet to be determined.

Finally, recent neuroimaging studies provide evidence of a variety of brain abnormalities in schizophrenia. Paul Thompson and his colleagues (2001) examined changes in the brains of adolescents whose MRI scans could be traced sequentially from the onset of schizophrenia. Over the years, the brains showed progressive tissue loss beginning in the parietal lobe and eventually encompassing much of the brain (see FIGURE 12.4 on page 388). All adolescents lose some gray matter over time in a kind of normal "pruning" of the brain, but in the case of those developing schizophrenia, the loss was dramatic enough to seem pathological. Of course, because these brain scans were obtained from adolescents who had already been diagnosed with schizophrenia, it isn't clear whether these biological changes are a cause, or an effect, of the disease.

dopamine hypothesis The idea that schizophrenia involves an excess of dopamine activity.

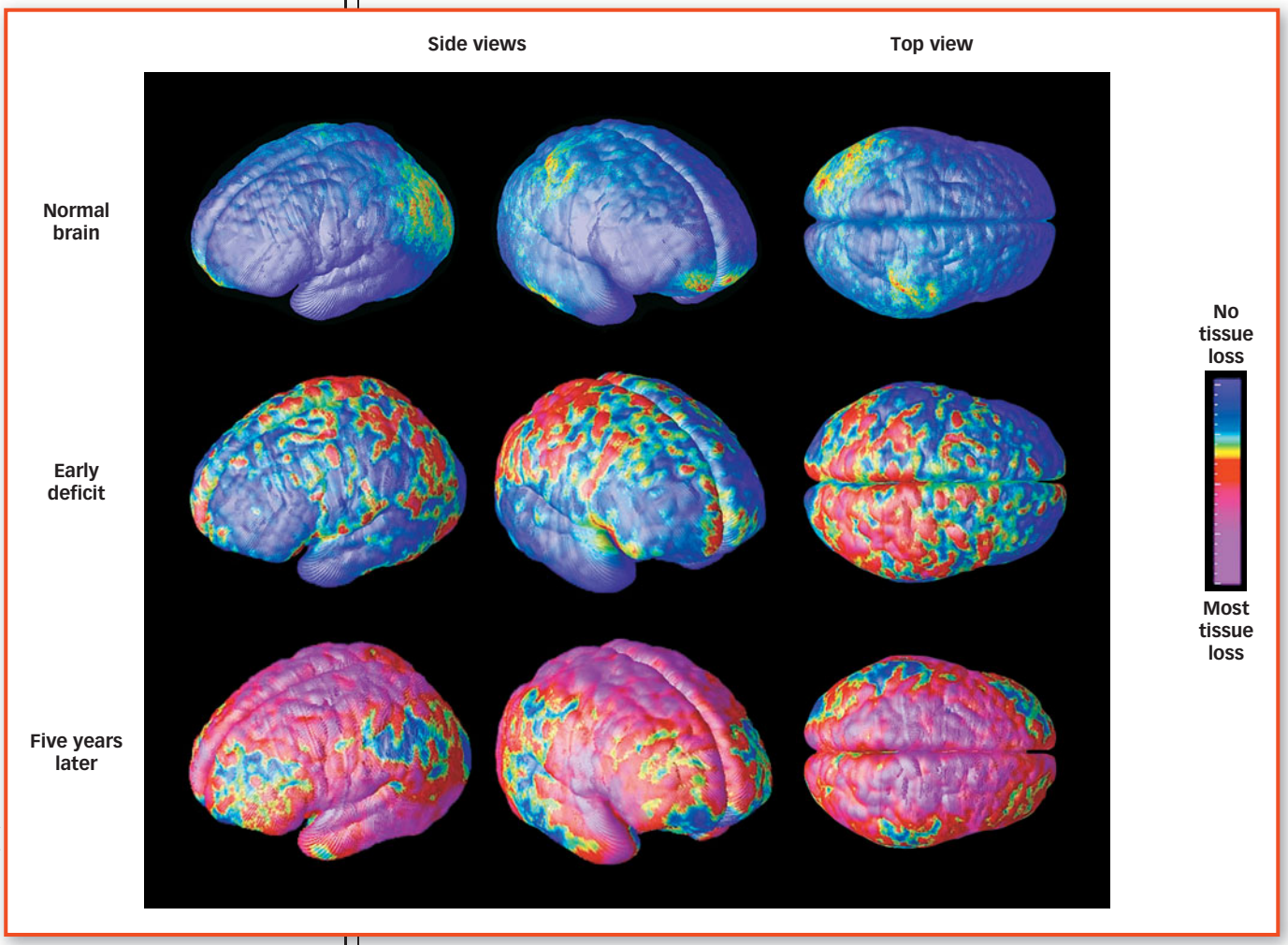


FIGURE 12.4
Brain Tissue Loss in Adolescent Schizophrenia
MRI scan composites reveal brain tissue loss in adolescents diagnosed with schizophrenia. Normal brains (top) show minimal loss due to "pruning." Early deficit scans (middle) reveal loss in the parietal areas. Patients at this stage may experience symptoms such as hallucinations or bizarre thoughts. Scans 5 years later (bottom) reveal extensive tissue loss over much of the cortex. Patients at this stage are likely to suffer from delusions, disorganized speech and behavior, and negative symptoms such as social withdrawal. (From Thompson et al., 2001.)

With all these potential biological contributors to schizophrenia, you might think there would be few psychological or social causes of the disorder. However, several studies do suggest that environment plays a role in the development of and recovery from the condition. One large-scale study compared the risk of schizophrenia in children adopted into healthy families and those adopted into severely disturbed families (Tienari et al., 2004). (Disturbed families were defined as those with extreme conflict, lack of communication, or chaotic relationships.) Among children whose biological mothers had schizophrenia, the disturbed environment increased the likelihood of developing schizophrenia—an outcome that was not found among children who were also reared in disturbed families but whose biological mothers did *not* have schizophrenia. This finding provides support for the diathesis-stress model described earlier. However, conclusions about the role of family functioning in the risk of schizophrenia must be tempered by the realization that the studies in this area are correlational and that a basic association between characteristics does not indicate that one causes the other (see Chapter 2). Thus, although dysfunction in families may contribute to schizophrenia, the reverse may also be true. The dysfunctional and bizarre behavior of a family member with schizophrenia may in itself be a source of stress that promotes dysfunctional communications and interactions among family members.

What are the roles of genetics and environment in schizophrenia?

summary quiz [12.5]

15. Schizophrenia affects about ___% of the population, and it accounts for nearly ___ % of admissions to state and county mental hospitals.
a. 1; 1 b. 1; 40 c. 5; 5 d. 5; 20

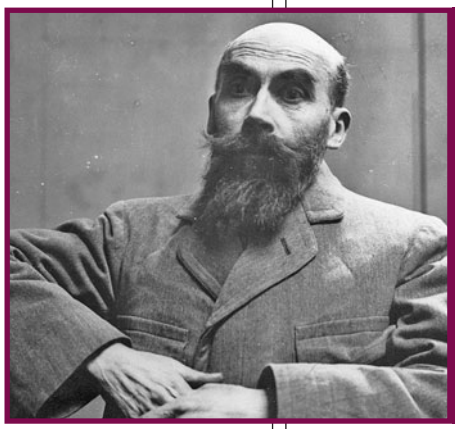
16. Amy believes that God is punishing her, and she sees evidence of this punishment in everyday events such as the way objects are positioned in the sink and the programs that are playing on TV. Amy would most likely be diagnosed with _____ schizophrenia.
a. paranoid
b. catatonic
c. disorganized
d. undifferentiated

17. Keith believes that he is Richard the Lionheart, who has been given the mission to lead a crusade against the heathens. Keith is showing
a. hallucinations.
b. disorganized speech.
c. delusions.
d. grossly disorganized behavior.

personality disorder Disorder characterized by deeply ingrained, inflexible patterns of thinking, feeling, or relating to others or controlling impulses that cause distress or impaired functioning.

antisocial personality disorder (APD) A pervasive pattern of disregard for and violation of the rights of others that begins in childhood or early adolescence and continues into adulthood.

Personality Disorders: Going to Extremes



THREE LIONS/GETTY IMAGES

Henri Desiré Landru (1869–1922), a serial killer who met widows through ads he placed in newspapers' lonely hearts columns. After obtaining enough information to embezzle money from them, he murdered 10 women and the son of one of the women. He was executed for serial murder in 1922.

Henri Desiré Landru began using the personal columns to attract a woman "interested in matrimony" in Paris in 1914, and he succeeded in seducing 10 women. He bilked them of their savings, poisoned them, and cremated them in his stove, also disposing of a boy and two dogs along the way. He recorded his murders in a notebook and maintained a marriage and a mistress all the while. The gruesome actions of serial killers such as Landru leave us frightened and wondering; however, bullies, compulsive liars, and even drivers who regularly speed through a school zone share the same shocking blindness to human pain. The *DSM-IV-TR* suggests that this pattern of extreme disregard for other people should be considered a disorder and offers the category **antisocial personality disorder (APD)**, defined as *a pervasive pattern of disregard for and violation of the rights of others that begins in childhood or early adolescence and continues into adulthood.*

More generally, **personality disorders** are *disorders characterized by deeply ingrained, inflexible patterns of thinking, feeling, or relating to others or controlling impulses that cause distress or impaired functioning.* Let's look at the types of personality disorders and then take a closer look at antisocial personality disorder.

© WALT DISNEY PICTURES/THE KOBAL COLLECTION

Teenage drama queen or early signs of histrionic personality disorder?

Types of Personality Disorders

The *DSM-IV-TR* lists 10 personality disorders (see **TABLE 12.3** on page 390), which can range from the relatively mild to the extreme and dangerous. You might think you recognize some of these descriptions as relating to people you know: schizotypal personality disorder might remind you of the oddly dressed spaceball who sits next to you in math class; obsessive-compulsive personality disorder might sound just like your perfectionist, neat-freak roommate, and so on. But don't rush to judgment. Having an odd personality is not the same thing as having a psychological disorder; the *DMS-IV-TR* specifically notes that a diagnosis of personality disorder requires that the symptoms cause distress or impaired functioning. Still, the array of personality disorders suggests that there are multiple ways an individual's gift of a unique personality could become a burden.

TABLE 12.3

Clusters of Personality Disorders

Cluster	Personality Disorder	Characteristics
A. Odd/ Eccentric	Schizotypal	Peculiar or eccentric manners of speaking or dressing. Strange beliefs. "Magical thinking" such as belief in ESP or telepathy. Difficulty forming relationships. May react oddly in conversation, not respond, or talk to self.Speech elaborate or difficult to follow. (Possibly a mild form of schizophrenia.)
	Paranoid	Distrust in others, suspicion that people have sinister motives. Apt to challenge the loyalties of friends and read hostile intentions into others' actions. Prone to anger and aggressive outbursts but otherwise emotionally cold. Often jealous, guarded, secretive, overly serious.
	Schizoid	Extreme introversion and withdrawal from relationships. Prefers to be alone, little interest in others. Humorless, distant, often absorbed with own thoughts and feelings, a daydreamer. Fearful of closeness, with poor social skills, often seen as a "loner."
B. Dramatic/ Erratic	Antisocial	Impoverished moral sense or "conscience." History of deception, crime, legal problems, impulsive and aggressive or violent behavior. Little emotional empathy or remorse for hurting others. Manipulative, careless, callous. At high risk for substance abuse and alcoholism.
	Borderline	Unstable moods and intense, stormy personal relationships. Frequent mood changes and anger, unpredictable impulses. Self-mutilation or suicidal threats or gestures to get attention or manipulate others. Self-image fluctuation and a tendency to see others as "all good" or "all bad."
	Histrionic	Constant attention seeking. Grandiose language, provocative dress, exaggerated illnesses, all to gain attention. Believes that everyone loves them. Emotional, lively, overly dramatic, enthusiastic, and excessively flirtatious. Shallow and labile true emotions. "Onstage."
	Narcissistic	Inflated sense of self-importance, absorbed by fantasies of self and success. Exaggerates own achievement, assumes others will recognize they are superior. Good first impressions but poor longer-term relationships. Exploitative of others.
C. Anxious/ Inhibited	Avoidant	Socially anxious and uncomfortable unless they are confident of being liked. In contrast with schizoid person, yearns for social contact. Fears criticism and worries about being embarrassed in front of others. Avoids social situations due to fear of rejection.
	Dependent	Submissive, dependent, requiring excessive approval, reassurance, and advice. Clings to people and fears losing them. Lacking self-confidence. Uncomfortable when alone. May be devastated by end of close relationship or suicidal if breakup is threatened.
	Obsessive-compulsive	Conscientious, orderly, perfectionist. Excessive need to do everything "right." Inflexibly high standards and caution can interfere with their productivity. Fear of errors can make them strict and controlling. Poor expression of emotions. (*Not* the same as obsessive-compulsive disorder.)

Source: From *DSM-IV-TR* (American Psychiatric Association, 2000).

Personality disorders are the most controversial classifications in the *DSM-IV-TR* for several reasons. First, critics question whether having a problem personality is really a disorder, given that 14.8% of the U.S. population has a personality disorder that fits a *DSM-IV-TR* description (Grant et al., 2004). Another question is whether personality problems correspond to "disorders" or whether such problems might be better understood as extreme values on trait dimensions such as the Big Five traits discussed in Chapter 12 (Trull & Durrett, 2005). Finally, definitions of many personality problems share characteristics with the major disorders and may be mild versions of these conditions. Overall, for example, roughly half of people with an anxiety or mood disorder have a comorbid personality disorder (Van Velzen & Emmelkamp, 1996). Research is ongoing on these various questions (Oldham, Skodol, & Bender, 2005).

● **Why is self-reporting a problem in diagnosing personality disorders?**

A further diagnostic complication is that personality measurement depends largely on self-reports. Not incidentally, people with exaggerated personalities often seem blind

to the high impact their personalities can have. For example, people suffering from paranoid personality disorder are likely to be suspicious of anyone who accuses them of paranoia; similarly, people with narcissistic personality disorder are likely to see comments on their personality as mere jealousy. It's difficult to see a troubled personality from the inside.

To solve this problem, researchers have turned to *peer nomination* measures, reports by others who know the person. Research on peer nominations in college sororities and fraternities and in groups of military recruits reveals that groups arrive at remarkably homogeneous assessments of their personality-disordered members (Oltmanns & Turkheimer, 2006). Through gossip or through personal experience, everybody in the group seems to know who among them is paranoid, dependent, avoidant, or unusual in some other way. Peer nominations using basic reports of the behavior of people in a group can predict which members will have further problems—such as dropping out of college or being discharged early from the military (Fiedler, Oltmanns, & Turkheimer, 2004).

BOB PETERSON/GETTY IMAGES

Military recruits going through basic training develop knowledge of one another's personalities. Their judgments of one another at the end of training produce valid predictions of who will later receive early discharge from the military.

The common feature of personality disorders is a failure to take other people's perspectives, particularly on the self. People with personality disorders often blame others, society, or the universe for their difficulties, distorting their perceptions of the world in a way that makes the personality disorder seem perfectly normal—at least to them. In many of the personality disorders, this blindness perpetuates the disorder and so hurts the person who suffers from it: People with personality disorders are often unhappy or depressed. Antisocial personality disorder, however, is particularly likely to go beyond harm to self and to exact a cost on anyone who knows the person—because the individual with antisocial personality disorder also lacks insight into what it means to hurt others.

Antisocial Personality Disorder

Adults with a diagnosis of antisocial personality disorder typically have a history of *conduct disorder* before the age of 15—problems such as aggression, destruction of property, rule violations, and deceitfulness, lying, or stealing. Early fire setting and cruelty to animals often predict antisocial tendencies. In adulthood, the diagnosis of APD is given to individuals who show three or more of a set of seven diagnostic signs: illegal behavior, deception, impulsivity, physical aggression, recklessness, irresponsibility, and a lack of remorse for wrongdoing. About 3.6% of the general population has antisocial personality disorder, and the rate of occurrence in men is three times the rate in women (Grant et al., 2004). Many people with APD commit crimes, and many are caught because of the frequency and flagrancy of their infractions. Among 22,790 prisoners in one study, 47% of the men and 21% of women were diagnosed with antisocial personality disorder (Fazel & Danesh, 2002). Statistics such as these support the notion of a "criminal personality," a person born to be wild.

What are some of the factors that contribute to APD?

Both the early onset of conduct problems and the lack of success in treatment suggest that career criminality has an internal cause (Lykken, 1995). Evidence of brain abnormalities in people with APD is also accumulating (Blair, Peschardt, & Mitchell, 2005). One line of investigation has looked at sensitivity to fear in psychopaths and individuals who show no such psychopathology. For example, criminal psychopaths who are shown negative emotional words such as *hate* or *corpse* exhibit less activity in the amygdala and hippocampus than do noncriminals (Kiehl et al., 2001). The two brain areas are involved in the process of fear conditioning (Patrick, Cuthbert, & Lang, 1994), so their relative inactivity in such studies suggests that psychopaths are less sensitive to fear than are other people. Violent psychopaths can target their aggression toward the self as well as others, often behaving in reckless ways that lead to violent ends. It might

seem peaceful to go through life "without fear," but perhaps fear is useful in keeping people from the extremes of antisocial behavior.

The psychological disorders we have examined in this chapter represent a tragic loss of human potential. The contentment, peace, and love that people could be enjoying are crowded out by pain and suffering when the mind goes awry (see the Hot Science box).

[HOT SCIENCE]

Positive Psychology: Exterminating the Mindbugs

You are now familiar with some of the most difficult challenges we face—profound, painful mental problems that can cause great unhappiness. Although the downside of human experience has always been part of the domain of psychology, psychologists' interests go beyond the negative aspects of life, including a flourishing movement known as *positive psychology*—an approach that seeks to understand what makes our lives pleasant, good, and meaningful. Martin E. P. Seligman has championed this movement, organizing the field of positive psychology by suggesting that human happiness and virtue deserve the same careful study usually devoted to mental disorders (and all the other mindbugs). In contrast to the classification of mental disorders in the *DSM,* for example, Seligman and his colleagues (Peterson & Seligman, 2004) introduced a complementary system for classifying, *Character Strengths and Virtues,* the *CSV*, which lists virtues such as wisdom and knowledge, courage, humanity, justice, and temperance. These positive qualities of humans are seldom mentioned in the *DSM,* of course, as they show the mind in good order rather than in disorder.

In line with the *CSV* system's positive approach, no individual is expected to have every strength or virtue, and individuals are not supposed to "keep score" by measuring themselves with this list. Rather, the list illustrates our potential to build personal strengths that help to make us happy and human. Listing positive characteristics of people makes for a kind of celebration, an appreciation of what being a person can be.

The positive psychology movement has been particularly effective in stimulating research on happiness. Each of us claims to be something of an expert on what will make us happy (Chocolate, please, lots of it, and on the double! No, wait, I'd like servants, that's it—servants! Or should I request world peace? No, no, a speedboat . . .), but it is often surprising just how mistaken we can be about what will bring us the joy we desire (Gilbert, 2006). Research supplies some happy facts:

- Money can buy happiness, but only a little. Wealthy people are only the tiniest bit happier than the average person (Diener, Horwitz, & Emmons, 1985), although extreme poverty is associated with less happiness—particularly in cultures where such poverty is rare (Diener & Biswas-Diener, 2002).
- Friends make you happy. People report that the main source of their happiness is relationships—with their friends, spouses, and children (*Time* poll, 2005).
- Some people do "live happily ever after." Married people are happier than singles, especially right after getting married and then again when their children are grown (Coombs, 1991). Their greater happiness may be, however, because they were happier to begin with (Lucas et al., 2003).
- Happiness is born, not made. Twin studies reveal that as much as 50% of variability in happiness is due to genetic factors (Lykken & Tellegen, 1996). Ideally, try to be born happy.
- Happy times may not last. People regularly overestimate the degree to which positive events such as winning the lottery will make them happy. They fail to appreciate their own tendency to adjust psychologically to emotional experiences and "get over it," no matter what "it" is (Gilbert, 2006; Wilson & Gilbert, 2003).
- Happiness dispels the blues. Happiness undermines negative emotions such as anger, fear, and sadness, acting to neutralize these feelings and enhance mental health (Fredrickson, 2001).

- Happiness comes from goodness. Doing good deeds or seeing them done can lead to feelings of elevation and happiness (Haidt, 2006).

More happy facts are surfacing every day, as many researchers have joined the movement toward positive psychology (Gable & Haidt, 2005). This movement provides a useful balance to the more common focus of the field on the negative—the disorders, the illusions, the errors, and, yes, the mindbugs. Knowing about mindbugs does aid in understanding how the mind works: As you have seen at many points in the text, you can learn a lot about a mechanism by seeing how it breaks down. All too often, though, the focus in studying psychological disorders and errors can be too gloomy, a constant reminder of the perils of being "only human." Like the good physician who brings to a patient's bedside both an analytical appreciation of the patient's disorder and a warm smile to help the patient through the rough times, the field of psychology must temper the bitter with the sweet. Psychological science can be most effective when it unites the problem-solving approach of studying disorders with the ideals and optimism of studying wellness.

A scientific approach to psychological disorders that views them through a medical model is beginning to sort out their symptoms and causes. As we will see in the next chapter, this approach already offers treatments for some disorders that are remarkably effective and for other disorders offers hope that pain and suffering can be alleviated in the future.

summary quiz [12.6]

18. Nina has an inflated sense of self-importance, is preoccupied with success fantasies, and assumes that others will recognize her superior achievements. Nina most likely would be diagnosed as having _____ personality disorder.

a. histrionic
b. narcissistic
c. borderline
d. antisocial

19. The common feature of personality disorders is

a. excessive fear of rejection or embarrassment.
b. unstable moods and stormy personal relationships.
c. a failure to take other people's perspectives, particularly on the self.
d. excessive attention seeking, through being overly dramatic.

20. Jim was diagnosed as having antisocial personality disorder based on the fact that he

a. is emotionally distant, suspicious of others, and has an intense fear of rejection.
b. avoids social interaction, has very poor social skills, and is often seen as a "loner."
c. is very peculiar in his speech and dress and has difficulty forming relationships.
d. is manipulative, impulsive, and shows little emotional empathy.

WhereDoYouStand?

Normal or Abnormal

In the course of learning about mental disorders, you may have found yourself thinking about how they relate to your own experience. On the one hand, imagining the experience of those with anxiety disorders or depression is fairly easy because you know what it feels like to be tense or blue. On the other hand, severe disorders may seem more foreign because they involve extreme distortions of reality reflected by hallucinations and bizarre delusions. But just how unusual are these severe symptoms?

Some of these symptoms are at least moderately common. In one study of 375 college students, 71% of participants reported hearing brief, occasional hallucinated voices during periods of wakefulness, and 39% had heard their own thoughts spoken aloud (Linszen et al., 1997; Posey & Losch, 1983). A study of 586 college students found that 30% to 40% had heard voices when no one was present, and of those, almost half heard voices at least once a month (Barrett & Etheridge, 1992). Reports of verbal hallucinations were not associated with measures of overt or incipient psychopathology. Apparently, hallucinatory experiences—at least of an auditory type—may not be as abnormal as you might have guessed.

What about delusional thinking? Beliefs about scientifically unverified, paranormal experiences may be pretty common. For example, in a survey of 60,000 adults, 50% expressed a belief in thought transference between two people, 25% said they believe in ghosts, and 25% in reincarnation (Cox & Cowling, 1989). Formal diagnostic interviews with a cross section of ordinary U.S. residents revealed that approximately 8% had delusions that met criteria for paranoia (Eaton et al., 1991).

So what is normal or abnormal? Where do you stand? Each of us may have some personal quirks that others would surely find abnormal—and we can certainly identify some of the things our friends do as pretty peculiar as well. As we have tried to demonstrate in this chapter, however, questions of what is normal or abnormal hinge more on what causes difficulty in people's lives than on simple counts of what behaviors are common or uncommon.

CHAPTER REVIEW

Summary

Identifying Psychological Disorders: What Is Abnormal?

- The study of psychological disorders follows a medical model in which symptoms are understood to indicate an underlying disorder.
- The *DSM-IV-TR* is a classification system that defines a psychological disorder as occurring when the person experiences disturbances of thought, emotion, or behavior that produce distress or impairment and that arise from internal sources.
- Many psychological disorders arise from multiple causes or as a result of the interaction of diathesis (internal predisposition) and stress. It is a common error to assume that an intervention that cures a disorder reflects the cause of the disorder.

Anxiety Disorders: When Fears Take Over

- People with anxiety disorders have irrational worries and fears that undermine their ability to function normally.
- Generalized anxiety disorder (GAD) involves a chronic state of anxiety, whereas phobic disorders involve anxiety tied to a specific object or situation.
- People who suffer from panic disorder experience recurring sudden and intense attacks of anxiety.
- People with obsessive-compulsive disorder experience recurring, anxiety-provoking thoughts that compel them to engage in ritualistic, irrational behavior.

Dissociative Disorders: Going to Pieces

- Dissociative disorders involve severely disjointed and fragmented cognitive processes reflected in significant disruptions in memory, awareness, or personality.
- People with dissociative identity disorder (DID) shift between two or more identities that are distinctive from each other in terms of personal memories, behavioral characteristics, and attitudes.
- Dissociative amnesia and dissociative fugue involve significant memory loss that is too extensive to be the result of normal forgetting and cannot be attributed to brain injury, drugs, or another mental disorder.

Mood Disorders: At the Mercy of Emotions

- Mood disorders are mental disorders in which a disturbance in mood is the predominant feature.
- Major depression (or unipolar depression) is characterized by a severely depressed mood lasting at least 2 weeks; symptoms include excessive self-criticism, guilt, difficulty concentrating, suicidal thoughts, sleep and appetite disturbances, and lethargy. Dysthymia, a related disorder, involves less severe symptoms that persist for at least 2 years.
- Bipolar disorder is an unstable emotional condition involving extreme mood swings of depression and mania. The manic phase is characterized by periods of abnormally and persistently elevated, expansive, or irritable mood, lasting at least 1 week.

Schizophrenia: Losing the Grasp on Reality

- Schizophrenia is a severe psychological disorder involving hallucinations, disorganized thoughts and behavior, and emotional and social withdrawal.
- Schizophrenia affects only 1% of the population, but it accounts for a disproportionate share of psychiatric hospitalizations.
- Risks for developing schizophrenia include genetic factors, biochemical factors (perhaps a complex interaction among many neurotransmitters), brain abnormalities, and a stressful home environment.

Personality Disorders: Going to Extremes

- Personality disorders are deeply ingrained, inflexible patterns of thinking, feeling, relating to others, or controlling impulses that cause distress or impaired functioning.
- Antisocial personality disorder is associated with a lack of moral emotions and behavior; people with antisocial personality disorder can be manipulative, dangerous, and reckless, often hurting others and sometimes hurting themselves.

Key Terms

psychological disorders (p. 363)
medical model (p. 365)
DSM-IV-TR (p. 366)
comorbidity (p. 368)
diathesis-stress model (p. 369)
anxiety disorder (p. 371)
generalized anxiety disorder (GAD) (p. 371)
phobic disorders (p. 372)
specific phobia (p. 372)
social phobia (p. 373)
preparedness theory (p. 373)
panic disorder (p. 374)
agoraphobia (p. 374)
obsessive-compulsive disorder (OCD) (p. 375)
dissociative disorder (p. 376)
dissociative identity disorder (DID), (p. 376)
dissociative fugue (p. 377)
dissociative amnesia (p. 377)
mood disorders (p. 378)
major depression (p. 379)
dysthymia (p. 379)
double depression (p. 379)
seasonal affective disorder (SAD), (p. 379)
helplessness theory (p. 380)
bipolar disorder (p. 381)
schizophrenia (p. 384)
delusion (p. 384)
hallucination (p. 384)
disorganized speech (p. 385)
grossly disorganized behavior (p. 385)
catatonic behavior (p. 385)
negative symptoms (p. 385)
dopamine hypothesis (p. 387)
antisocial personality disorder (APD), (p. 389)
personality disorders (p. 389)

Critical Thinking Questions

1. Psychological disorders can be caused by biological, psychological, and environmental factors. The diathesis-stress model suggests that a person may be predisposed for a psychological disorder that remains unexpressed until triggered by stress.

   Suppose that identical twins (with the same genetic profile) grow up in the same household (sharing the same parents, the same basic diet, the same access to television, etc.). As a teenager, one twin but not the other develops a mental disorder such as schizophrenia. How could this be?

2. Phobias are anxiety disorders that involve excessive and persistent fear of a specific object, activity or situation. Some phobias may be learned through classical conditioning, in which a conditioned stimulus (CS) that is paired with an anxiety-evoking stimulus (US) itself comes to elicit a fear response (CR).

   Suppose a friend of yours has a phobia of dogs which is so intense that he is afraid to go outside in case one of his neighbors' dogs barks at him. Using the principles of classical conditioning you learned in Chapter 5, how might you help him overcome his fear?

3. Major depression (also known as unipolar depression) is characterized by a severely depressed mood, accompanied by feelings of worthlessness and lack of pleasure, and by sleep and appetite disturbances. To be characterized as major depression, the episode must last at least 2 weeks, but on average episodes last about 6 months.

   Both seasonal affective disorder (SAD) and bipolar disorder involve shorter, but cyclically recurring, depressive episodes. If you have a friend who experiences recurring periods of severe depression, how would you determine whether she is suffering from SAD or bipolar disorder?

Answers to Summary Quizzes

Summary Quiz 12.1
1. b; 2. d; 3. c

Summary Quiz 12.2
4. b; 5. a; 6. d; 7. c

Summary Quiz 12.3
8. a; 9. b; 10. c

Summary Quiz 12.4
11. c; 12. a; 13. b; 14. d

Summary Quiz 12.5
15. b; 16. a ; 17. c

Summary Quiz 12.6
18. b; 19. c; 20. d