

Unit XII

Abnormal Behavior

Modules

- 65 Introduction to Psychological Disorders
- 66 Anxiety Disorders, Obsessive-Compulsive Disorder, and Posttraumatic Stress Disorder
- 67 Mood Disorders
- 68 Schizophrenia
- 69 Other Disorders

I felt the need to clean my room at home in Indianapolis every Sunday and would spend four to five hours at it. I would take every book out of the bookcase, dust and put it back. . . . I couldn't stop.

Marc, diagnosed with obsessive-compulsive disorder (from Summers, 1996)

Whenever I get depressed it's because I've lost a sense of self. I can't find reasons to like myself. I think I'm ugly. I think no one likes me.

Greta, diagnosed with depression (from Thorne, 1993, p. 21)

Voices, like the roar of a crowd, came. I felt like Jesus; I was being crucified.

Stuart, diagnosed with schizophrenia (from Emmons et al., 1997)

People are fascinated by the exceptional, the unusual, the abnormal. "The sun shines and warms and lights us and we have no curiosity to know why this is so," observed Ralph Waldo Emerson, "but we ask the reason of all evil, of pain, and hunger, and [unusual] people."

Why such fascination with disturbed people? Even when we are well, do we see in them something of ourselves? At various moments, all of us feel, think, or act the way disturbed people do much of the time. We, too, get anxious, depressed, withdrawn, suspicious, or deluded, just less intensely and more briefly. No wonder studying psychological disorders sometimes evokes an eerie sense of self-recognition, one that illuminates our own personality. "To study the abnormal is the best way of understanding the normal," proposed William James (1842–1910).



Another reason for our curiosity is that so many of us have felt, either personally or through friends or family, the bewilderment and pain of a psychological disorder that may bring unexplained physical symptoms, irrational fears, or a feeling that life is not worth living. Indeed, as members of the human family, most of us will at some point encounter a person with a psychological disorder.

The World Health Organization (WHO, 2010) reports that, worldwide, some 450 million people suffer from mental or behavioral disorders. These disorders account for 15.4 percent of the years of life lost due to death or disability—scoring slightly below cardiovascular conditions and slightly above cancer (Murray & Lopez, 1996). Rates and symptoms of psychological disorders vary by culture, but two terrible maladies appear more consistently worldwide: depression and schizophrenia.

Module 65

Introduction to Psychological Disorders

Module Learning Objectives

- 65-1 Discuss how we draw the line between normality and disorder.
- 65-2 Discuss the controversy over the diagnosis of attention-deficit/hyperactivity disorder.
- 65-3 Contrast the medical model with the biopsychosocial approach to psychological disorders.
- 65-4 Describe how and why clinicians classify psychological disorders.
- 65-5 Explain why some psychologists criticize the use of diagnostic labels.
- 65-6 Discuss the prevalence of psychological disorders, and summarize the findings on the link between poverty and serious psychological disorders.



Most people would agree that someone who is too depressed to get out of bed for weeks at a time has a psychological disorder. But what about those who, having experienced a loss, are unable to resume their usual social activities? Where should we draw the line between sadness and depression? Between zany creativity and bizarre irrationality? Between normality and abnormality? Let's start with these questions:

- How should we *define* psychological disorders?
- How should we *understand* disorders? How do underlying biological factors contribute to disorder? How do troubling environments influence our well-being? And how do these effects of nature and nurture interact?
- How should we *classify* psychological disorders? And can we do so in a way that allows us to help people without stigmatizing them with *labels*?

“Who in the rainbow can draw the line where the violet tint ends and the orange tint begins? Distinctly we see the difference of the colors, but where exactly does the one first blendingly enter into the other? So with sanity and insanity.” -HERMAN MELVILLE, *BILLY BUDD, SAILOR*, 1924

Defining Psychological Disorders

65-1 How should we draw the line between normality and disorder?

A **psychological disorder** is a syndrome marked by a “clinically significant disturbance in an individual’s cognition, emotion regulation, or behavior” (American Psychiatric Association, 2013). Disturbed, or *dysfunctional*, behaviors are *maladaptive*—they interfere with normal day-to-day life. An intense fear of spiders may be abnormal, but if it doesn’t interfere with your life, it is not a disorder. Marc’s cleaning rituals (from this unit’s opening) did interfere with his work and leisure. If occasional sad moods persist and become disabling, they may signal a psychological disorder. Distress often accompanies dysfunctional behaviors. Marc, Greta, and Stuart were all distressed by their behaviors or emotions.

Over time, definitions of what makes for a “significant disturbance” have varied. From 1952 through December 9, 1973, homosexuality was classified as a mental illness. By day’s end on December 10, it was not. The American Psychiatric Association had dropped homosexuality as a disorder because more and more of its members no longer viewed it as a psychological problem. (Later research revealed that the stigma and stresses that often accompany homosexuality, however, increase the risk of mental health problems [Hatzenbuehler et al., 2009; Meyer, 2003].) In this new century, controversy swirls over the frequent diagnosing of children with *attention-deficit/hyperactivity disorder* (see Thinking Critically About: ADHD—Normal High Energy or Disordered Behavior? on the next page).

psychological disorder

a syndrome marked by a clinically significant disturbance in an individual’s cognition, emotion regulation, or behavior. (Adapted from American Psychiatric Association, 2013.)

Carol Beckwith



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Culture and normality

Young men of the West African Wodaabe tribe put on elaborate makeup and costumes to attract women. Young American men may buy flashy cars with loud stereos to do the same. Each culture may view the other’s behavior as abnormal.

Understanding Psychological Disorders

65-3 How do the medical model and the biopsychosocial approach understand psychological disorders?

To explain puzzling behavior, people in earlier times often presumed the work of strange forces—the movements of the stars, godlike powers, or evil spirits. Had you lived during the Middle Ages, you might have said, “The devil made him do it,” and you might have



John W. Verano

Yesterday’s “therapy” In other times and places, psychologically disordered people sometimes received brutal treatments, including the trepanation evident in this Stone Age skull. Drilling skull holes like these may have been an attempt to release evil spirits and cure those with mental disorders. Did this patient survive the “cure”?

approved of a cure to rid the evil force by exorcising the demon. Until the last two centuries, “mad” people were sometimes caged in zoo-like conditions or given “therapies” appropriate to a demon: beatings, burning, or castration. In other times, therapy included pulling teeth, removing lengths of intestines, cauterizing the clitoris, or giving transfusions of animal blood (Farina, 1982).

Thinking Critically About

ADHD—Normal High Energy or Disordered Behavior?

65-2

Why is there controversy over attention-deficit/hyperactivity disorder?

Eight-year-old Todd has always been energetic. At home, he chatters away and darts from one activity to the next, rarely settling down to read a book or focus on a game. At play, he is reckless and overreacts when playmates bump into him or take one of his toys. At school, his exasperated teacher complains that fidgety Todd doesn’t listen, follow instructions, or stay in his seat and do his lessons. As he matures to adulthood, Todd’s hyperactivity likely will subside, but his inattentiveness may persist (Kessler et al., 2010).

If taken for a psychological evaluation, Todd may be diagnosed with **attention-deficit/hyperactivity disorder (ADHD)**, as are some 11 percent of American 4- to 17-year-olds who display its key symptoms (extreme inattention, hyperactivity, and impulsivity) (Schwarz & Cohen, 2013). Studies also find 2.5 percent of adults—though a diminishing number with age—exhibiting ADHD symptoms (Simon et al., 2009). Psychiatry’s new diagnostic manual loosens the criteria for adult ADHD, leading critics to fear increased diagnosis and overuse of prescription drugs (Frances, 2012).

To skeptics, being distractible, fidgety, and impulsive sounds like a “disorder” caused by a single genetic variation: a Y chromosome. And sure enough, ADHD is diagnosed three times more often in boys than in girls. Does energetic child + boring school = ADHD overdiagnosis? Is the label being applied to healthy schoolchildren who, in more natural outdoor environments, would seem perfectly normal?

Skeptics think so. In the decade after 1987, they note, the proportion of American children being treated for ADHD nearly quadrupled (Olfson et al., 2003). How commonplace the diagnosis is depends in part on teacher referrals. Some teachers refer lots of kids for ADHD assessment, others none. ADHD rates have varied by a factor of 10 in different counties of New York State (Carlson, 2000). Although African-American youth display more ADHD symptoms than do Caucasian youth, they less often receive an ADHD diagnosis (Miller et al., 2009). Depending on where they live, children who are “a persistent pain in the neck in school” are often diagnosed with ADHD and given powerful prescription drugs, notes Peter Gray (2010). But the problem resides less in the child, he argues, than in today’s abnormal environment

that forces children to do what evolution has not prepared them to do—to sit for long hours in chairs.

On the other side of the debate are those who argue that the more frequent diagnoses of ADHD today reflect increased awareness of the disorder, especially in those areas where rates are highest. They acknowledge that diagnoses can be subjective and sometimes inconsistent—ADHD is not as objectively defined as is a broken arm. Nevertheless, declared the World Federation for Mental Health (2005), “there is strong agreement among the international scientific community that ADHD is a real neurobiological disorder whose existence should no longer be debated.” A consensus statement by 75 researchers noted that in neuroimaging studies, ADHD has associations with abnormal brain activity patterns (Barkley et al., 2002).

What, then, is known about ADHD’s causes? It is not caused by too much sugar or poor schools. There is mixed evidence suggesting that extensive TV watching and video gaming are associated with reduced cognitive self-regulation and ADHD (Bailey et al., 2011; Courage & Setliff, 2010; Ferguson, 2011). ADHD often coexists with a learning disorder or with defiant and temper-prone behavior. ADHD is *heritable*, and research teams are sleuthing the culprit genes and abnormal neural pathways (Nikolas & Burt, 2010; Poelmans et al., 2011; Volkow et al., 2009; Williams et al., 2010). It is treatable with medications such as Ritalin and Adderall, which are considered stimulants but help calm hyperactivity and increase the ability to sit and focus on a task—and to progress normally in school (Barbaresi et al., 2007). Psychological therapies, such as those focused on shaping behaviors in the classroom and at home, have also helped address the distress of ADHD (Fabiano et al., 2008).

The bottom line: Extreme inattention, hyperactivity, and impulsivity can derail social, academic, and vocational achievements, and these symptoms can be treated with medication and other therapies. But the debate continues over whether normal rambunctiousness is too often diagnosed as a psychiatric disorder, and whether there is a cost to the long-term use of stimulant drugs in treating ADHD.

attention-deficit/hyperactivity disorder (ADHD)

a psychological disorder marked by the appearance by age 7 of one or more of three key symptoms: extreme inattention, hyperactivity, and impulsivity.

The Medical Model

In opposition to brutal treatments, reformers, including Philippe Pinel (1745–1826) in France, insisted that madness is not demon possession but a sickness of the mind caused by severe stresses and inhumane conditions. For Pinel and others, “moral treatment” included boosting patients’ morale by unchaining them and talking with them, and by replacing brutality with gentleness, isolation with activity, and filth with clean air and sunshine. While such measures did not often cure patients, they were certainly more humane.

By the 1800s, the discovery that syphilis infects the brain and distorts the mind drove further gradual reform. Hospitals replaced asylums, and the medical world began searching for physical causes and treatments of mental disorders. Today, this **medical model** is recognizable in the terminology of the mental *health* movement: A mental *illness* (also called a *psychopathology*) needs to be *diagnosed* on the basis of its *symptoms* and *treated* through *therapy*, which may include time in a psychiatric *hospital*.

The medical perspective has gained credibility from recent discoveries that genetically influenced abnormalities in brain structure and biochemistry contribute to many disorders. But as we will see, psychological factors, such as chronic or traumatic stress, also play an important role.

medical model the concept that diseases, in this case psychological disorders, have physical causes that can be *diagnosed*, *treated*, and, in most cases, *cured*, often through treatment in a *hospital*.

Dance in a Madhouse, 1917 (litho), Bellows, George Wesley (1862–1925)/San Diego Museum of Art, USA/Museum Purchase/The Bridgeman Art Library



“Moral treatment” Under Philippe Pinel’s influence, hospitals sometimes sponsored patient dances, often called “lunatic balls,” depicted in this painting by George Bellows (*Dance in a Madhouse*).

The Biopsychosocial Approach

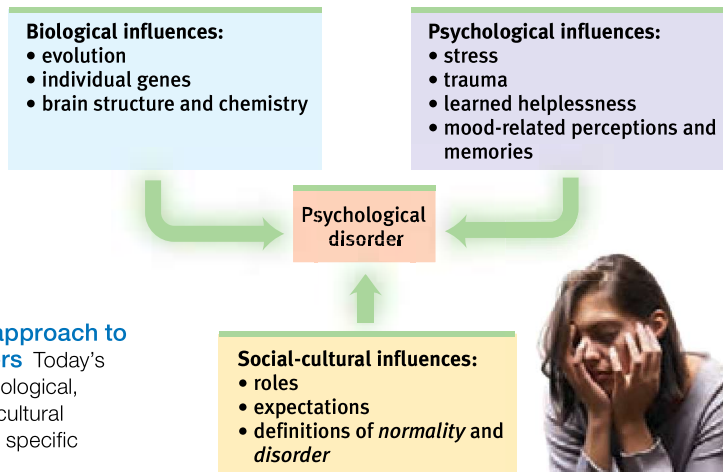
Today’s psychologists contend that all behavior, whether called normal or disordered, arises from the interaction of nature (genetic and physiological factors) and nurture (past and present experiences). To presume that a person is “mentally ill,” they say, attributes the condition to a “sickness” that must be identified and cured. But difficulty in the person’s environment, the person’s current interpretations of events, or the person’s bad habits and poor social skills may also be factors.

Evidence of such effects comes from links between specific disorders and cultures (Beardsley, 1994; Castillo, 1997). Cultures differ in their sources of stress, and they produce different ways of coping. The eating disorders anorexia nervosa and bulimia nervosa, for example, have occurred mostly in Western cultures. In Malaysia, *amok* describes a sudden outburst of violent behavior (thus the phrase “run amok”). Latin America lays claim to *susto*, a condition marked by severe anxiety, restlessness, and a fear of black magic. *Taijin-kyofusho*, social anxiety about one’s appearance combined with a readiness to blush and a fear of eye contact, appears in Japan, as does the extreme withdrawal of *hikikomori*. Such disorders may share an underlying dynamic (such as anxiety) while differing in the symptoms (an eating problem or a type of fear) manifested in a particular culture.

But not all disorders are culture-bound. Depression and schizophrenia occur worldwide. From Asia to Africa and across the Americas, schizophrenia’s symptoms often include irrationality and incoherent speech.

FYI

Increasingly, North American disorders, such as eating disorders, are, along with McDonald’s and MTV, spreading across the globe (Watters, 2010).

**Figure 65.1****The biopsychosocial approach to psychological disorders**

Today's psychology studies how biological, psychological, and social-cultural factors interact to produce specific psychological disorders.

To assess the whole set of influences—genetic predispositions and physiological states, inner psychological dynamics, and social and cultural circumstances—the biopsychosocial model helps (FIGURE 65.1). This approach recognizes that mind and body are inseparable. Negative emotions contribute to physical illness, and physical abnormalities contribute to negative emotions. We are mind embodied and socially embedded.

Classifying Psychological Disorders

65-4 How and why do clinicians classify psychological disorders?

In biology and the other sciences, classification creates order. To classify an animal as a “mammal” says a great deal—that it is warm-blooded, has hair or fur, and nourishes its young with milk. In psychiatry and psychology, too, classification orders and describes symptoms. To classify a person’s disorder as “schizophrenia” suggests that the person talks incoherently; hallucinates or has delusions (bizarre beliefs); shows either little emotion or inappropriate emotion; or is socially withdrawn. “Schizophrenia” provides a handy shorthand for describing a complex disorder.

In psychiatry and psychology, diagnostic classification aims not only to describe a disorder but also to predict its future course, imply appropriate treatment, and stimulate research into its causes. Indeed, to study a disorder we must first name and describe it. The most common system for describing disorders and estimating how often they occur is the American Psychiatric Association’s 2013 *Diagnostic and Statistical Manual of Mental Disorders*, now in its fifth edition (**DSM-5**). Physicians and mental health workers use the detailed “diagnostic criteria and codes” in the DSM-5 to guide medical diagnoses and define who is eligible for treatments, including medication. For example, a person may be diagnosed with and treated for “insomnia disorder” if he or she meets *all* of the following criteria:

- Is dissatisfied with sleep quantity or quality (difficulty initiating, maintaining, or returning to sleep).
- Sleep disturbance causes distress or impairment in everyday functioning.
- Occurs at least three nights per week.
- Present for at least three months.
- Occurs despite adequate opportunity for sleep.
- Is not explained by another sleep disorder (such as narcolepsy).
- Is not caused by substance use or abuse.
- Is not caused by other mental disorders or medical conditions.

In this new DSM edition, some diagnostic labels have changed. For example, “autism” and “Asperger’s syndrome” are no longer included; they have been combined into “autism spectrum disorder.” “Mental retardation” has become “intellectual disability.” New categories include “hoarding disorder” and “binge-eating disorder.”

FYI

A book of case illustrations accompanying the previous DSM edition provides several examples for this unit.

DSM-5 the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition; a widely used system for classifying psychological disorders.

Some new or altered diagnoses are controversial. “Disruptive mood dysregulation disorder” is a new DSM-5 diagnosis for children “who exhibit persistent irritability and frequent episodes of behavior outbursts three or more times a week for more than a year.” Will this diagnosis assist parents who struggle with unstable children, or will it “turn temper tantrums into a mental disorder” and lead to overmedication, as the chair of the previous DSM edition has warned (Frances, 2012)?

Critics have long faulted the DSM for casting too wide a net and bringing “almost any kind of behavior within the compass of psychiatry” (Eysenck et al., 1983). They worry that the DSM-5 will extend the pathologizing of everyday life—for example, by turning bereavement grief into depression and boyish rambunctiousness into ADHD (Frances, 2013). Others respond that depression and hyperactivity, though needing careful definition, are genuine disorders even, for example, those triggered by a major life stress such as a death when the grief does not go away (Kendler, 2011; Kupfer, 2012).



“I’m always like this, and my family was wondering if you could prescribe a mild depressant.”

Labeling Psychological Disorders

65-5 Why do some psychologists criticize the use of diagnostic labels?

The DSM has other critics who register a more fundamental complaint—that these labels are at best arbitrary and at worst value judgments masquerading as science. Once we label a person, we view that person differently (Farina, 1982). Labels create preconceptions that guide our perceptions and our interpretations.

In a now-classic study of the biasing power of labels, David Rosenhan (1973) and seven others went to hospital admissions offices, complaining of “hearing voices” saying *empty*, *hollow*, and *thud*. Apart from this complaint and giving false names and occupations, they answered questions truthfully. All eight normal people were misdiagnosed with disorders.

Should we be surprised? As one psychiatrist noted, if someone swallows blood, goes to an emergency room, and spits it up, should we fault the doctor for diagnosing a bleeding ulcer? Surely not. But what followed the diagnosis in the Rosenhan study was startling. Until being released an average of 19 days later, the “patients” exhibited no further symptoms such as hearing voices. Yet after analyzing their (quite normal) life histories, clinicians were able to “discover” the causes of their disorders, such as reacting with mixed emotions about a parent. Even the routine behavior of taking notes was misinterpreted as a symptom.

Labels matter. When people in another experiment watched videotaped interviews, those told the interviewees were job applicants perceived them as normal (Langer et al., 1974, 1980). Those who thought they were watching psychiatric or cancer patients perceived them as “different from most people.” Therapists who thought an interviewee was a psychiatric patient perceived him as “frightened of his own aggressive impulses,” a “passive, dependent type,” and so forth. A label can, as Rosenhan discovered, have “a life and an influence of its own.”

Surveys in Europe and North America have demonstrated the stigmatizing power of labels (Page, 1977). Getting a job or finding a place to rent can be a challenge for those known to be just released from prison—or a mental hospital. But as we are coming to understand that many psychological disorders are diseases of the brain, not failures of character, the stigma seems to be lifting (Solomon, 1996). Public figures are feeling freer to “come out” and speak with candor about their struggles with disorders such as depression. And the more contact people have with individuals with disorders, the more accepting their attitudes are (Kolodziej & Johnson, 1996). People express greatest sympathy for people whose disorders are gender atypical—for men suffering depression (which is more common among women), or for women plagued by alcohol use disorder (Wirth & Bodenhausen, 2009).

“One of the unpardonable sins, in the eyes of most people, is for a man to go about unlabeled. The world regards such a person as the police do an unmuzzled dog, not under proper control.” -T. H. HUXLEY, *EVOLUTION AND ETHICS*, 1893

“My sister suffers from a bipolar disorder and my nephew from schizoaffective disorder. There has, in fact, been a lot of depression and alcoholism in my family and, traditionally, no one ever spoke about it. It just wasn’t done. The stigma is toxic.” -ACTRESS GLENN CLOSE, “MENTAL ILLNESS: THE STIGMA OF SILENCE,” 2009

Accurate portrayal

Recent films have offered some realistic depictions of psychological disorders. *Black Swan* (2010), shown here, portrayed a main character suffering a delusional disorder. *Temple Grandin* (2010) dramatized a lead character who successfully copes with autism spectrum disorder. *A Single Man* (2009) depicted depression.



Protozoa Pictures/Phoenix Pictures/The Kobal Collection

Nevertheless, stereotypes linger in media portrayals of psychological disorders. Some are reasonably accurate and sympathetic. But too often people with disorders are portrayed as objects of humor or ridicule (*As Good as It Gets*), as homicidal maniacs (Hannibal Lecter in *Silence of the Lambs*), or as freaks (Nairn, 2007). Apart from the few who experience threatening delusions and hallucinated voices that command a violent act, and from those whose dysfunctionality includes substance abuse, mental disorders seldom lead to violence (Douglas et al., 2009; Elbogen & Johnson, 2009; Fazel et al., 2009, 2010). In real life, people with disorders are more likely to be the *victims* of

violence than the perpetrators (Marley & Bulia, 2001). Indeed, reported the U.S. Surgeon General's Office (1999, p. 7), "There is very little risk of violence or harm to a stranger from casual contact with an individual who has a mental disorder." (Although most people with psychological disorders are not violent, those who are create a moral dilemma for society. For more on this topic, see Thinking Critically About: Insanity and Responsibility.)

AP® Exam Tip

Notice that the term *insanity* comes out of the legal system. It is not a psychological or medical diagnosis and does not appear in the DSM-5.

Thinking Critically About**Insanity and Responsibility**

"My brain . . . my genes . . . my bad upbringing made me do it." Such defenses were anticipated by Shakespeare's Hamlet. If I wrong someone when not myself, he explained, "then Hamlet does it not, Hamlet denies it. Who does it then? His madness." Such is the essence of a legal insanity defense. "Insanity" is a legal rather than a psychological concept, and was created in 1843 after a deluded Scotsman tried to shoot the prime minister (who he thought was persecuting him) but killed an assistant by mistake. Like U.S. President Ronald Reagan's near-assassin, John Hinckley, Scotsman Daniel M'Naghten was sent to a mental hospital rather than to prison.

In both cases, the public was outraged. "Hinckley Insane, Public Mad," declared one headline. They were mad again when a deranged Jeffrey Dahmer in 1991 admitted murdering 15 young men and eating parts of their bodies. They were mad in 1998 when 15-year-old Kip Kinkel, driven by "those voices in my head," killed his parents and two fellow Springfield, Oregon, students and wounded 25 others. They were mad in 2002 when Andrea Yates, after being taken off her antipsychotic medication, was tried in Texas for drowning her five children. And they were mad in 2011, when an irrational Jared Loughner gunned down a crowd of people, including survivor Congresswoman Gabrielle Giffords, in an Arizona supermarket parking lot. Following their arrest, most of these people were sent to jails, not hospitals. (Hinckley was sent to a psychiatric hospital and later, after another trial, Yates was instead hospitalized.) As Yates' fate illustrates, 99 percent of those whose insanity defense is accepted are nonetheless institutionalized, often for as long as those convicted of crimes (Lilienfeld & Arkowitz, 2011).

HANDOUT/Reuters/Corbis



Jail or hospital? Jared Lee Loughner was charged with the 2011 Tucson, Arizona, shooting that killed six people and left over a dozen others injured, including U.S. Representative Gabrielle Giffords. Loughner had a history of mental health issues, including paranoid beliefs, and was diagnosed with schizophrenia. Usually, however, schizophrenia is only associated with violence when accompanied by substance abuse (Fazel et al., 2009).

Most people with psychological disorders are not violent. But what should society do with those who are? What do we do with disturbed individuals who mow down innocents at movie theaters and schools? Sometimes there is nothing to be done, as in the case of the 2012 Sandy Hook Elementary School tragedy in Connecticut, where the shooter's final fatal shot was self-inflicted. Many people who have been executed or are now on death row have been limited by intellectual disability or motivated by delusional voices. The State of Arkansas forced one murderer with schizophrenia, Charles Singleton, to take two anti-psychotic drugs—in order to make him mentally competent, so that he could then be put to death.

Which of Yates' two juries made the right decision? The first, which decided that people who commit such rare but terrible crimes should be held responsible? Or the second, which decided to blame the "madness" that clouds their vision? As we come to better understand the biological and environmental basis for all human behavior, from generosity to vandalism, when should we—and should we not—hold people accountable for their actions?

Not only can labels bias perceptions, they can also change reality. When teachers are told certain students are “gifted,” when students expect someone to be “hostile,” or when interviewers check to see whether someone is “extraverted,” they may act in ways that elicit the very behavior expected (Snyder, 1984). Someone who was led to think you are nasty may treat you coldly, leading you to respond as a mean-spirited person would. Labels can serve as self-fulfilling prophecies.

But let us remember the *benefits* of diagnostic labels. Mental health professionals use labels to communicate about their cases, to comprehend the underlying causes, and to discern effective treatment programs. Diagnostic definitions also inform patient self-understandings. And they are useful in research that explores the causes and treatments of disordered behavior.

Rates of Psychological Disorders

65-6 How many people suffer, or have suffered, from a psychological disorder? Is poverty a risk factor?

Who is most vulnerable to psychological disorders? At what times of life? To answer such questions, various countries have conducted lengthy, structured interviews with representative samples of thousands of their citizens. After asking hundreds of questions that probed for symptoms—“Has there ever been a period of two weeks or more when you felt like you wanted to die?”—the researchers have estimated the current, prior-year, and lifetime prevalence of various disorders.

How many people have, or have had, a psychological disorder? More than most of us suppose:

- The U.S. National Institute of Mental Health (2008, based on Kessler et al., 2005) estimates that 26 percent of adult Americans “suffer from a diagnosable mental disorder in a given year” (**TABLE 65.1**).
- A large-scale World Health Organization (2004a) study—based on 90-minute interviews of 60,463 people—estimated the number of prior-year mental disorders in 20 countries. As **FIGURE 65.2** displays, the lowest rate of reported mental disorders was in Shanghai, the highest rate in the United States. Moreover, immigrants to the United States from Mexico, Africa, and Asia average better mental health than their native U.S. counterparts (Breslau et al., 2007; Maldonado-Molina et al., 2011). For example, compared with people who have recently immigrated from Mexico, Mexican-Americans born in the United States are at greater risk of mental disorder—a phenomenon known as the *immigrant paradox* (Schwartz et al., 2010).

Table 65.1 Percentage of Americans Reporting Selected Psychological Disorders in the Past Year

Psychological Disorder	Percentage
Generalized anxiety	3.1
Social anxiety disorder	6.8
Phobia of specific object or situation	8.7
Mood disorder	9.5
Obsessive-compulsive disorder (OCD)	1.0
Schizophrenia	1.1
Posttraumatic stress disorder (PTSD)	3.5
Attention-deficit/hyperactivity disorder (ADHD)	4.1
Any mental disorder	26.2

Source: National Institute of Mental Health, 2008.

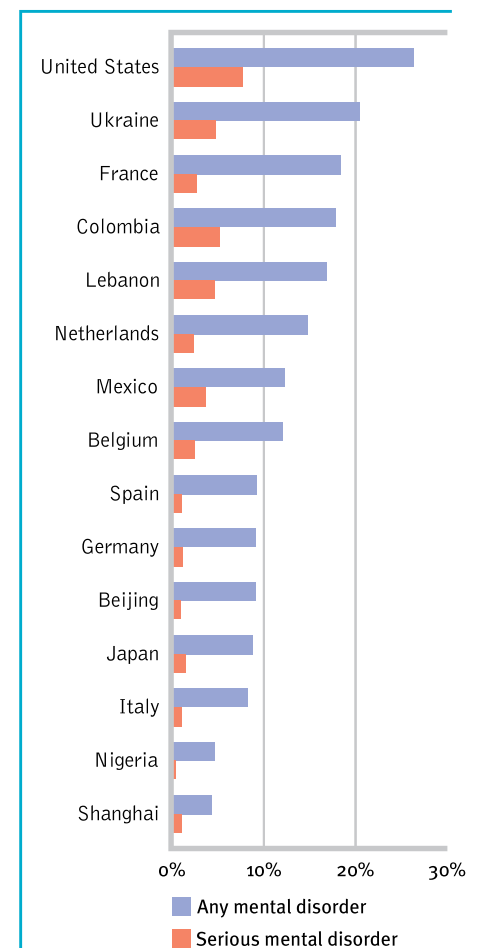


Figure 65.2 Prior-year prevalence of disorders in selected areas From World Health Organization (WHO, 2004a) interviews in 20 countries.

Who is most vulnerable to mental disorders? As we have seen, the answer varies with the disorder. One predictor of mental disorder, poverty, crosses ethnic and gender lines. The incidence of serious psychological disorders has been doubly high among those below the poverty line (CDC, 1992). Like so many other correlations, the poverty-disorder association raises a chicken-and-egg question: Does poverty cause disorders? Or do disorders cause poverty? It is both, though the answer varies with the disorder. Schizophrenia understandably leads to poverty. Yet the stresses and demoralization of poverty can also precipitate disorders, especially depression in women and substance use disorder in men (Dohrenwend et al., 1992). In one natural experiment on the poverty-pathology link, researchers tracked rates of behavior problems in North Carolina Native American children as economic development enabled a dramatic reduction in their community's poverty rate. As the study began, children of poverty exhibited more deviant and aggressive behaviors. After four years, children whose families had moved above the poverty line exhibited a 40 percent decrease in the behavior problems, while those who continued in their previous positions below or above the poverty line exhibited no change (Costello et al., 2003).

As **TABLE 65.2** indicates, there is a wide range of risk and protective factors for mental disorders. At what times of life do disorders strike? Usually by early adulthood. "Over 75 percent of our sample with any disorder had experienced its first symptoms by age 24," reported Lee Robins and Darrel Regier (1991, p. 331). The symptoms of antisocial personality disorder and of phobias are among the earliest to appear, at a median age of 8 and 10, respectively. Symptoms of alcohol use disorder, obsessive-compulsive disorder, bipolar disorder, and schizophrenia appear at a median age near 20. Major depression often hits somewhat later, at a median age of 25. Such findings make clear the need for research and treatment to help the growing number of people, especially teenagers and young adults, who suffer the bewilderment and pain of a psychological disorder.

Table 65.2 Risk and Protective Factors for Mental Disorders

Risk Factors	Protective Factors
Academic failure	Aerobic exercise
Birth complications	Community offering empowerment, opportunity, and security
Caring for chronically ill or patients with neurocognitive disorder	Economic independence
Child abuse and neglect	Effective parenting
Chronic insomnia	Feelings of mastery and control
Chronic pain	Feelings of security
Family disorganization or conflict	Literacy
Low birth weight	Positive attachment and early bonding
Low socioeconomic status	Positive parent-child relationships
Medical illness	Problem-solving skills
Neurochemical imbalance	Resilient coping with stress and adversity
Parental mental illness	Self-esteem
Parental substance abuse	Social and work skills
Personal loss and bereavement	Social support from family and friends
Poor work skills and habits	
Reading disabilities	
Sensory disabilities	
Social incompetence	
Stressful life events	
Substance abuse	
Trauma experiences	

Source: World Health Organization (WHO, 2004b,c).

Although mindful of the pain, we can also be encouraged by the many successful people—including Leonardo da Vinci, Isaac Newton, and Leo Tolstoy—who pursued brilliant careers while enduring psychological difficulties. So have 18 U.S. presidents, including the periodically depressed Abraham Lincoln, according to one psychiatric analysis of their biographies (Davidson et al., 2006). The bewilderment, fear, and sorrow caused by psychological disorders are real. But, as Unit XIII shows, hope, too, is real.

Before You Move On

▶ ASK YOURSELF

How would you draw the line between sending disturbed criminals to prisons or to mental hospitals? Would the person's history (for example, having suffered child abuse) influence your decisions?

▶ TEST YOURSELF

What is the biopsychosocial approach, and why is it important in our understanding of psychological disorders?

Answers to the Test Yourself questions can be found in Appendix E at the end of the book.

Module 65 Review

65-1 How should we draw the line between normality and disorder?

- According to psychologists and psychiatrists, a *psychological disorder* is a syndrome marked by a clinically significant disturbance in an individual's cognition, emotion regulation, or behavior.
- The biopsychosocial approach assumes that three sets of influences—biological (evolution, genetics, brain structure and chemistry), psychological (stress, trauma, learned helplessness, mood-related perceptions and memories), and social-cultural (roles, expectations, definitions of “normality” and “disorder”)—interact to produce specific psychological disorders.

65-2 Why is there some controversy over attention-deficit/hyperactivity disorder?

- A child who by age 7 displays extreme inattention, hyperactivity, and impulsivity may be diagnosed with *attention-deficit/hyperactivity disorder (ADHD)* and treated with medication and other therapy.
- The controversy centers on whether the growing number of ADHD cases reflects overdiagnosis or increased awareness of the disorder. Long-term effects of stimulant-drug treatment for ADHD are not yet known.

65-3 How do the medical model and the biopsychosocial approach understand psychological disorders?

- The *medical model* assumes that psychological disorders are mental illnesses with physical causes that can be diagnosed, treated, and, in most cases, cured through therapy, sometimes in a hospital.

65-4 How and why do clinicians classify psychological disorders?

- The American Psychiatric Association's *DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition)* contains diagnostic labels and descriptions that provide a common language and shared concepts for communication and research.
- Some critics believe the DSM editions have become too detailed and extensive.

65-5 Why do some psychologists criticize the use of diagnostic labels?

- Other critics view DSM diagnoses as arbitrary labels that create preconceptions which bias perceptions of the labeled person's past and present behavior. The legal label, "insanity," raises moral and ethical questions about whether society should hold people with disorders responsible for their violent actions.
- Most people with disorders are nonviolent and are more likely to be victims than attackers.

65-6 How many people suffer, or have suffered, from a psychological disorder? Is poverty a risk factor?

- Psychological disorder rates vary, depending on the time and place of the survey. In one multinational survey, rates for any disorder ranged from less than 5 percent (Shanghai) to more than 25 percent (the United States).
- Poverty is a risk factor: Conditions and experiences associated with poverty contribute to the development of psychological disorders. But some disorders, such as schizophrenia, can drive people into poverty.

Multiple-Choice Questions

- Which of the following describes the idea that psychological disorders can be diagnosed and treated?
 - Taijin-kyofusho
 - The DSM
 - The biopsychosocial approach
 - Amok
 - The medical model
- Which of the following is the primary purpose of the DSM?
 - Diagnosis of mental disorders
 - Selection of appropriate psychological therapies for mental disorders
 - Placement of mental disorders in appropriate cultural context
 - Selection of appropriate medicines to treat mental disorders
 - Understanding the causes of mental disorders
- Which of the following disorders do Americans report most frequently?
 - Schizophrenia
 - Mood disorders
 - Posttraumatic stress disorder (PTSD)
 - Obsessive-compulsive disorder (OCD)
 - Attention-deficit/hyperactivity disorder (ADHD)

Practice FRQs

- Name and describe the two major approaches to understanding psychological disorders.
- Explain two criticisms of the DSM. *(2 points)*

Answer

2 points: The medical model, which is an attempt to first diagnose and then treat psychological disorders.

2 points: The biopsychosocial approach, which is an attempt to understand psychological disorders as an interaction of biological, psychological, and social-cultural factors.

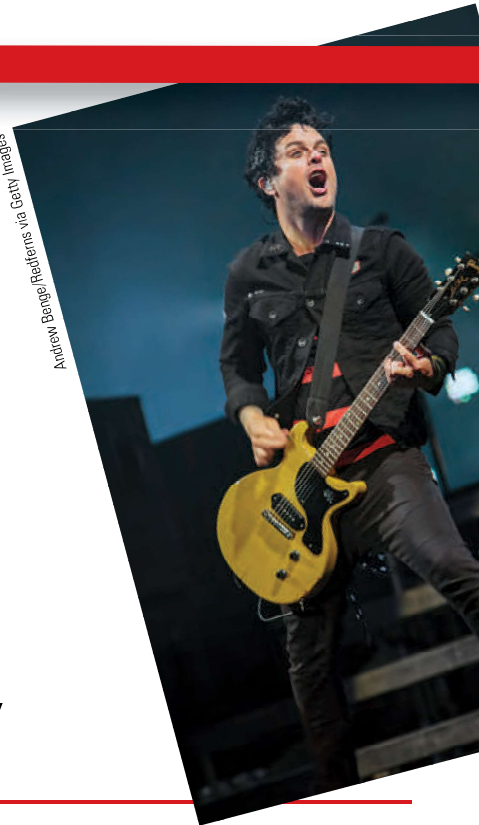
Module 66

Anxiety Disorders, Obsessive-Compulsive Disorder, and Posttraumatic Stress Disorder

Module Learning Objectives

- 66-1** Identify the different anxiety disorders.
- 66-2** Describe obsessive-compulsive disorder.
- 66-3** Describe posttraumatic stress disorder.
- 66-4** Describe how the learning and biological perspectives explain anxiety disorders, OCD, and PTSD.

Andrew Bengtson/Fredriens via Getty Images



66-1 What are the different anxiety disorders?

Anxiety is part of life. Speaking in front of a class, peering down from a ladder, or waiting to play in a big game, any one of us might feel anxious (even seasoned performers like Green Day's Billie Joe Armstrong, whose anxiety and substance abuse resulted in cancelled concerts in 2012 and 2013). At times we may feel enough anxiety to avoid making eye contact or talking with someone—"shyness," we call it. Fortunately for most of us, our uneasiness is not intense and persistent.

Some of us, however, are more prone to notice and remember threats (Mitte, 2008). This tendency may place us at risk for one of the **anxiety disorders**, marked by distressing, persistent anxiety or dysfunctional anxiety-reducing behaviors. We will consider these three:

- *Generalized anxiety disorder*, in which a person is unexplainably and continually tense and uneasy
- *Panic disorder*, in which a person experiences sudden episodes of intense dread
- *Phobias*, in which a person is intensely and irrationally afraid of a specific object or situation

Two other disorders involve anxiety, though the DSM-5 now classifies them separately:

- *Obsessive-compulsive disorder*, in which a person is troubled by repetitive thoughts or actions
- *Posttraumatic stress disorder*, in which a person has lingering memories, nightmares, and other symptoms for weeks after a severely threatening, uncontrollable event

anxiety disorders psychological disorders characterized by distressing, persistent anxiety or maladaptive behaviors that reduce anxiety.

Snapshots



Obsessing about obsessive-compulsive disorder

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AP® Exam Tip

The way disorders are classified can be confusing, so it's worth taking some time to keep the organization straight. Sometimes, there is a broad classification that includes more specific disorders—the broad category of anxiety disorders, for example, includes generalized anxiety disorder, panic disorder, and phobia. Other times, there is just one level of classification. Obsessive-compulsive disorder and posttraumatic stress disorder do not fit into broader categories.

Generalized Anxiety Disorder

For the past two years, Tom, a 27-year-old electrician, has been bothered by dizziness, sweating palms, heart palpitations, and ringing in his ears. He feels edgy and sometimes finds himself shaking. With reasonable success, he hides his symptoms from his family and co-workers. But he allows himself few other social contacts, and occasionally he has to leave work. His family doctor and a neurologist can find no physical problem.

Tom's unfocused, out-of-control, agitated feelings suggest a **generalized anxiety disorder**, which is marked by pathological worry. The symptoms of this disorder are commonplace; their persistence, for six months or more, is not. People with this condition—two-thirds are women (McLean & Anderson, 2009)—worry continually, and they are often jittery, agitated, and sleep-deprived. Concentration is difficult as attention switches from worry to worry, and their tension and apprehension may leak out through furrowed brows, twitching eyelids, trembling, perspiration, or fidgeting.

One of generalized anxiety disorder's worst characteristics is that the person may not be able to identify, and therefore deal with or avoid, its cause. To use Sigmund Freud's term, the anxiety is *free-floating*. Generalized anxiety disorder is often accompanied by depressed mood, but even without depression it tends to be disabling (Hunt et al., 2004; Moffitt et al., 2007b). Moreover, it may lead to physical problems, such as high blood pressure.

Many people with generalized anxiety disorder were maltreated and inhibited as children (Moffitt et al., 2007a). As time passes, however, emotions tend to mellow, and by age 50, generalized anxiety disorder becomes fairly rare (Rubio & López-Ibor, 2007).

Panic Disorder

Panic disorder entails an anxiety tornado. Panic strikes suddenly, wreaks havoc, and disappears. For the 1 person in 75 with this disorder, anxiety suddenly escalates into a terrifying *panic attack*—a minutes-long episode of intense fear that something horrible is about to happen. Heart palpitations, shortness of breath, choking sensations, trembling, or dizziness typically accompany the panic, which may be misperceived as a heart attack or other serious physical ailment. Smokers have at least a doubled risk of panic disorder (Zvolensky & Bernstein, 2005). Because nicotine is a stimulant, lighting up doesn't lighten up.

One woman recalled suddenly feeling “hot and as though I couldn't breathe. My heart was racing and I started to sweat and tremble and I was sure I was going to faint. Then my fingers started to feel numb and tingly and things seemed unreal. It was so bad I wondered if I was dying and asked my husband to take me to the emergency room. By the time we got there (about 10 minutes) the worst of the attack was over and I just felt washed out” (Greist et al., 1986).

Phobias

Phobias are anxiety disorders in which an irrational fear causes the person to avoid some object, activity, or situation. Many people accept their phobias and live with them, but others are incapacitated by their efforts to avoid the feared situation. Marilyn, an otherwise healthy and happy 28-year-old, fears thunderstorms so intensely that she feels anxious as soon as a weather forecaster mentions possible storms later in the week. If her husband is away and a storm is forecast, she may stay with a close relative. During a storm, she hides from windows and buries her head to avoid seeing the lightning.

Other *specific phobias* may focus on animals, insects, heights, blood, or enclosed spaces (**FIGURE 66.1**). People avoid the stimulus that arouses the fear, hiding during thunderstorms or avoiding high places.

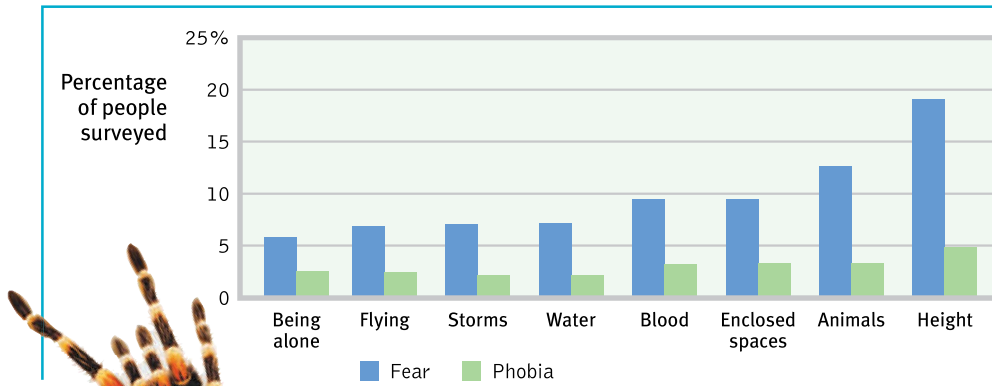
Not all phobias have such specific triggers. **Social anxiety disorder** (formerly called *social phobia*) is shyness taken to an extreme. Those with social anxiety disorder,

generalized anxiety disorder an anxiety disorder in which a person is continually tense, apprehensive, and in a state of autonomic nervous system arousal.

panic disorder an anxiety disorder marked by unpredictable, minutes-long episodes of intense dread in which a person experiences terror and accompanying chest pain, choking, or other frightening sensations. Often followed by worry over a possible next attack.

phobia an anxiety disorder marked by a persistent, irrational fear and avoidance of a specific object, activity, or situation.

social anxiety disorder intense fear of social situations, leading to avoidance of such. (Formerly called *social phobia*.)

**Figure 66.1**

Some common and uncommon specific fears This Dutch national interview study identified the commonality of various specific fears. A strong fear becomes a phobia if it provokes a compelling but irrational desire to avoid the dreaded object or situation. (From Delpa et al., 2008.)



an intense fear of being scrutinized by others, avoid potentially embarrassing social situations, such as speaking up, eating out, or going to parties—or will sweat or tremble when doing so.

Much as fretting over insomnia may, ironically, cause insomnia, so worries about anxiety—perhaps fearing another panic attack, or fearing anxiety-caused sweating in public—can amplify anxiety symptoms (Olatunji & Wolitzky-Taylor, 2009). People who have experienced several panic attacks may come to avoid situations where the panic has struck before. If the fear is intense enough, it may become **agoraphobia**, fear or avoidance of situations in which escape might be difficult or help unavailable when panic strikes. Given such fear, people may avoid being outside the home, in a crowd, on a bus, or on an elevator.

After spending five years sailing the world, Charles Darwin began suffering panic disorder at age 28. Because of the attacks, he moved to the country, avoided social gatherings, and traveled only in his wife’s company. But the relative seclusion did free him to focus on developing his evolutionary theory. “Even ill health,” he reflected, “has saved me from the distraction of society and its amusements” (quoted in Ma, 1997).

agoraphobia fear or avoidance of situations, such as crowds or wide open places, where one has felt loss of control and panic.

obsessive-compulsive disorder (OCD) a disorder characterized by unwanted repetitive thoughts (obsessions) and/or actions (compulsions).

Obsessive-Compulsive Disorder

66-2 What is obsessive-compulsive disorder?

As with generalized anxiety and phobias, we can see aspects of **obsessive-compulsive disorder (OCD)** in our everyday behavior. We all may at times be obsessed with senseless or offensive thoughts that will not go away. Or we may engage in compulsive behaviors, perhaps lining up books and pencils “just so” before studying.

Obsessive thoughts and compulsive behaviors cross the fine line between normality and disorder when they persistently interfere with everyday living and cause distress. Checking to see you locked the door is normal; checking 10 times is not. Washing your hands is normal; washing so often that your skin becomes raw is not. (**TABLE 66.1** on the next page offers more examples.) At some time during their lives, often during their late teens or twenties, 2 to 3 percent of people cross that line from normal preoccupations and fussiness to debilitating disorder (Karno et al., 1988). Although the person knows them to be irrational, the anxiety-fueled obsessive thoughts become so haunting, the compulsive rituals so senselessly time-consuming, that effective functioning becomes impossible.

Making everything perfect

Soccer star David Beckham has openly discussed his obsessive-compulsive tendencies, which have driven him to line up objects in pairs or to spend hours straightening furniture (Adams, 2011).



Table 66.1 Common Obsessions and Compulsions Among Children and Adolescents With Obsessive-Compulsive Disorder

Thought or Behavior	Percentage Reporting Symptom
Obsessions (repetitive <i>thoughts</i>)	
Concern with dirt, germs, or toxins	40
Something terrible happening (fire, death, illness)	24
Symmetry, order, or exactness	17
Compulsions (repetitive <i>behaviors</i>)	
Excessive hand washing, bathing, toothbrushing, or grooming	85
Repeating rituals (in/out of a door, up/down from a chair)	51
Checking doors, locks, appliances, car brakes, homework	46

Source: Adapted from Rapoport, 1989.

posttraumatic stress disorder (PTSD) a disorder characterized by haunting memories, nightmares, social withdrawal, jumpy anxiety, numbness of feeling, and/or insomnia that lingers for four weeks or more after a traumatic experience.

OCD is more common among teens and young adults than among older people (Samuels & Nestadt, 1997). A 40-year follow-up study of 144 Swedish people diagnosed with the disorder found that, for most, the obsessions and compulsions had gradually lessened, though only 1 in 5 had completely recovered (Skoog & Skoog, 1999).

Posttraumatic Stress Disorder

66-3 What is posttraumatic stress disorder?

As an Iraq war soldier, Jesse “saw the murder of children, women. It was just horrible for anyone to experience.” After calling in a helicopter strike on one house where he had seen ammunition crates carried in, he heard the screams of children from within. “I didn’t know there were kids there,” he recalls. Back home in Texas, he suffered “real bad flashbacks” (Welch, 2005).

Our memories exist in part to protect us in the future. So there is biological wisdom in not being able to forget our most emotional or traumatic experiences—our greatest embarrassments, our worst accidents, our most horrid experiences. But sometimes, for some of us, the unforgettable takes over our lives. The complaints of battle-scarred

veterans such as Jesse—recurring haunting memories and nightmares, a numbed social withdrawal, jumpy anxiety, insomnia—are typical of what once was called “shellshock” or “battle fatigue” and now is called **posttraumatic stress disorder (PTSD)** (Babson & Feldner, 2010; Yufik & Simms, 2010). What defines and explains PTSD is less the event itself than the severity and persistence of the trauma memory (Rubin et al., 2008).

PTSD symptoms have also been reported by survivors of accidents, disasters, and violent and sexual assaults (including an estimated two-thirds of prostitutes) (Brewin et al., 1999; Farley et al., 1998; Taylor et al., 1998). A month after the 9/11 terrorist attacks, a survey of Manhattan residents indicated that 8.5 percent were suffering PTSD, most as a result of the attack (Galea et al., 2002). Among those living near the World Trade Center, 20 percent reported such telltale signs as nightmares, severe anxiety, and fear of public places (Susser et al., 2002).

Bringing the war home Nearly a quarter of a million Iraq and Afghanistan war veterans have been diagnosed with PTSD or traumatic brain injury (TBI). Many vets participate in an intensive recovery program using deep breathing, massage, and group and individual discussion techniques to treat their PTSD or TBI.



To pin down the frequency of this disorder, the U.S. Centers for Disease Control (1988) compared 7000 Vietnam combat veterans with 7000 noncombat veterans who served during the same years. On average, according to a reanalysis, 19 percent of all Vietnam veterans reported PTSD symptoms. The rate varied from 10 percent among those who had never seen combat to 32 percent among those who had experienced heavy combat (Dohrenwend et al., 2006). Similar variations in rates have been found among more recent combat veterans and among people who have experienced a natural disaster or have been kidnapped, held captive, tortured, or raped (Brewin et al., 2000; Brody, 2000; Kessler, 2000; Stone, 2005; Yaffe et al., 2010).

The toll seems at least as high for veterans of the Iraq war, where 1 in 6 U.S. combat infantry personnel has reported symptoms of PTSD, depression, or severe anxiety in the months after returning home (Hoge et al., 2006, 2007). In one study of 103,788 veterans returning from Iraq and Afghanistan, 1 in 4 was diagnosed with a psychological disorder, most frequently PTSD (Seal et al., 2007).

So what determines whether a person suffers PTSD after a traumatic event? Research indicates that the greater one's emotional distress during a trauma, the higher the risk for posttraumatic symptoms (Ozer et al., 2003). Among New Yorkers who witnessed the 9/11 attacks, PTSD was doubled for survivors who were inside rather than outside the World Trade Center (Bonanno et al., 2006). And the more frequent an assault experience, the more adverse the long-term outcomes tend to be (Golding, 1999). In the 30 years after the Vietnam war, veterans who came home with a PTSD diagnosis had twice the normal likelihood of dying (Crawford et al., 2009).

A sensitive limbic system seems to increase vulnerability, by flooding the body with stress hormones again and again as images of the traumatic experience erupt into consciousness (Kosslyn, 2005; Ozer & Weiss, 2004). Brain scans of PTSD patients suffering memory flashbacks reveal an aberrant and persistent right temporal lobe activation (Engdahl et al., 2010). Genes may also play a role. In one study, combat-exposed men had identical twins who did not experience combat. But these nonexposed co-twins still tended to share their brother's risk for cognitive difficulties, such as unfocused attention. Such findings suggest that some PTSD symptoms may actually be genetically predisposed (Gilbertson et al., 2006).

Some psychologists believe that PTSD has been overdiagnosed, due partly to a broadening definition of *trauma* (Dobbs, 2009; McNally, 2003). PTSD is actually infrequent, say those critics, and well-intentioned attempts to have people relive the trauma may exacerbate their emotions and pathologize normal stress reactions (Wakefield & Spitzer, 2002). "Debriefing" survivors right after a trauma by getting them to revisit the experience and vent emotions has actually proven generally ineffective and sometimes harmful (Bonanno et al., 2010).

Researchers have noted the impressive *survivor resiliency* of those who do *not* develop PTSD (Bonanno et al., 2010). About half of adults experience at least one traumatic event in their lifetime, but only about 1 in 10 women and 1 in 20 men develop PTSD (Olf et al., 2007; Ozer & Weiss, 2004; Tolin & Foa, 2006). More than 9 in 10 New Yorkers, although stunned and grief-stricken by 9/11, did *not* respond pathologically. By the following January, the stress symptoms of the rest had mostly subsided (Galea et al., 2002). Similarly, most combat-stressed veterans and most political dissidents who survive dozens of episodes of torture do not later exhibit PTSD (Mineka & Zinbarg, 1996). Likewise, the Holocaust survivors in 71 studies "showed remarkable resilience." Despite some lingering stress symptoms, most experienced essentially normal physical health and cognitive functioning (Barel et al., 2010).

Psychologist Peter Suedfeld (1998, 2000; Cassel & Suedfeld, 2006), who as a boy survived the Holocaust under deprived conditions while his mother died in Auschwitz, has documented the *resilience* of Holocaust survivors, most of whom have lived productive lives. "It is not always true that 'What doesn't kill you makes you stronger,' but it is often true," he reports. And "what doesn't kill you may reveal to you just how strong you really are."

Indeed, suffering can lead to "benefit finding" (Aspinwall & Tedeschi, 2010a,b; Helgeson et al., 2006), and to what Richard Tedeschi and Lawrence Calhoun (2004) call **posttraumatic growth**. Tedeschi and Calhoun have found that the struggle with challenging crises, such as

FYI

A \$125 million, five-year U.S. Army program is currently assessing the well-being of 800,000 soldiers and training them in emotional resilience (Stix, 2011).

posttraumatic growth positive psychological changes as a result of struggling with extremely challenging circumstances and life crises.

facing cancer, often leads people later to report an increased appreciation for life, more meaningful relationships, increased personal strength, changed priorities, and a richer spiritual life. This idea—that suffering has transformative power—is also found in Judaism, Christianity, Hinduism, Buddhism, and Islam. The idea is confirmed by research with ordinary people. Compared with those with traumatic life histories and with those unchallenged by any significant adversity, people whose life history includes *some* adversity tend to enjoy better mental health and well-being (Seery et al., 2010). Out of even our worst experiences some good can come. Like the body, the mind has great recuperative powers and may grow stronger with exertion.

Understanding Anxiety Disorders, OCD, and PTSD

66-4

How do the learning and biological perspectives explain anxiety disorders, OCD, and PTSD?

Anxiety is both a feeling and a cognition, a doubt-laden appraisal of one's safety or social skill. How do these anxious feelings and cognitions arise? Freud's psychoanalytic theory proposed that, beginning in childhood, people *repress* intolerable impulses, ideas, and feelings and that this submerged mental energy sometimes produces mystifying symptoms, such as anxiety. Today's psychologists have instead turned to two contemporary perspectives—learning and biological.

The Learning Perspective

CLASSICAL AND OPERANT CONDITIONING

When bad events happen unpredictably and uncontrollably, anxiety or other disorders often develop (Field, 2006b; Mineka & Oehlberg, 2008). Recall from Unit VI that dogs learn to fear neutral stimuli associated with shock and that infants come to fear furry objects associated with frightening noises. Using classical conditioning, researchers have also created chronically anxious, ulcer-prone rats by giving them unpredictable electric shocks (Schwartz, 1984). Like assault victims who report feeling anxious when returning to the scene of the crime, the rats become apprehensive in their lab environment. This link between conditioned fear and general anxiety helps explain why anxious or traumatized people are hyperattentive to possible threats, and how panic-prone people come to associate anxiety with certain cues (Bar-Haim et al., 2007; Bouton et al., 2001). In one survey, 58 percent of those with social anxiety disorder experienced their disorder after a traumatic event (Ost & Hugdahl, 1981).

Through conditioning, the short list of naturally painful and frightening events can multiply into a long list of human fears. My car was once struck by another whose driver missed a stop sign. For months afterward, I felt a twinge of unease when any car approached from a side street. Marilyn's phobia of thunderstorms may have been similarly conditioned during a terrifying or painful experience associated with a thunderstorm.

Two specific learning processes can contribute to these disorders. The first, *stimulus generalization*, occurs, for example, when a person attacked by a fierce dog later develops a fear of *all* dogs. The second learning process, *reinforcement*, helps maintain our phobias and compulsions after they arise. Avoiding or escaping the feared situation reduces anxiety, thus reinforcing the phobic behavior. Feeling anxious or fearing a panic attack, a person may go inside and be reinforced by feeling calmer (Antony et al., 1992). Compulsive behaviors operate similarly. If washing your hands relieves your feelings of anxiety, you may wash your hands again when those feelings return.

OBSERVATIONAL LEARNING

We may also learn fear through observational learning—by observing others' fears. Susan Mineka (1985, 2002) sought to explain why nearly all monkeys reared in the wild fear snakes, yet lab-reared monkeys do not. Surely, most wild monkeys do not actually suffer snake bites.

AP® Exam Tip

This is a good time to return to Unit VI and review the principles of classical and operant conditioning.

Do they learn their fear through observation? To find out, Mineka experimented with six monkeys reared in the wild (all strongly fearful of snakes) and their lab-reared offspring (virtually none of which feared snakes). After repeatedly observing their parents or peers refusing to reach for food in the presence of a snake, the younger monkeys developed a similar strong fear of snakes. When retested three months later, their learned fear persisted. Humans likewise learn fears by observing others (Olsson et al., 2007).

COGNITION

Observational learning is not the only cognitive influence on feelings of anxiety. As the next unit's discussion of cognitive-behavioral therapy illustrates, our interpretations and irrational beliefs can also cause feelings of anxiety. Whether we interpret the creaky sound in the old house simply as the wind or as a possible knife-wielding intruder determines whether we panic. People with anxiety disorder also tend to be *hypervigilant*. A pounding heart becomes a sign of a heart attack. A lone spider near the bed becomes a likely infestation. An everyday disagreement with a friend or boss spells possible doom for the relationship. Anxiety is especially common when people cannot switch off such intrusive thoughts and perceive a loss of control and sense of helplessness (Franklin & Foa, 2011).

The Biological Perspective

There is, however, more to anxiety, OCD, and PTSD than conditioning, observational learning, and cognition. The biological perspective can help us understand why few people develop lasting phobias after suffering traumas, why we learn some fears more readily, and why some individuals are more vulnerable.

NATURAL SELECTION

We humans seem biologically prepared to fear threats faced by our ancestors. Our phobias focus on such specific fears: spiders, snakes, and other animals; enclosed spaces and heights; storms and darkness. (Those fearless about these occasional threats were less likely to survive and leave descendants.) Thus, even in Britain, with only one poisonous snake species, people often fear snakes. And preschool children more speedily detect snakes in a scene than flowers, caterpillars, or frogs (LoBue & DeLoache, 2008). It is easy to condition and hard to extinguish fears of such "evolutionarily relevant" stimuli (Coelho & Purkis, 2009; Davey, 1995; Öhman, 2009).

Our modern fears can also have an evolutionary explanation. For example, a fear of flying may come from our biological predisposition to fear confinement and heights. Moreover, consider what people tend *not* to learn to fear. World War II air raids produced remarkably few lasting phobias. As the air blitzes continued, the British, Japanese, and German populations became not more panicked, but rather more indifferent to planes outside their immediate neighborhoods (Mineka & Zinbarg, 1996). Evolution has not prepared us to fear bombs dropping from the sky.

Just as our phobias focus on dangers faced by our ancestors, our compulsive acts typically exaggerate behaviors that contributed to our species' survival. Grooming gone wild becomes hair pulling. Washing up becomes ritual hand washing. Checking territorial boundaries becomes rechecking an already locked door (Rapoport, 1989).

GENES

Some people are more anxious than others. Genes matter. Pair a traumatic event with a sensitive, high-strung temperament and the result may be a new phobia (Belsky & Pluess, 2009). Some of us have genes that make us like orchids—fragile, yet capable of beauty under favorable circumstances. Others of us are like dandelions—hardy, and able to thrive in varied circumstances (Ellis & Boyce, 2008).

Among monkeys, fearfulness runs in families. Individual monkeys react more strongly to stress if their close biological relatives are anxiously reactive (Suomi, 1986).



Reuters/Mike Blake/Landov

Fearless The biological perspective helps us understand why most people would be too afraid to try U.S. Olympic snowboarder Shaun White's tricks. White is less vulnerable to a fear of heights than most of us!

In humans, vulnerability to anxiety disorders rises when an afflicted relative is an identical twin (Hettema et al., 2001; Kendler et al., 1992, 1999, 2002a,b). Identical twins also may develop similar phobias, even when raised separately (Carey, 1990; Eckert et al., 1981). One pair of 35-year-old female identical twins independently became so afraid of water that each would wade in the ocean backward and only up to the knees.

Given the genetic contribution to anxiety disorders, researchers are now sleuthing the culprit genes. One research team has identified 17 genes that appear to be expressed with typical anxiety disorder symptoms (Hovatta et al., 2005). Other teams have found genes associated specifically with OCD (Dodman et al., 2010; Hu et al., 2006).

Genes influence disorders by regulating neurotransmitters. Some studies point to an anxiety gene that affects brain levels of *serotonin*, a neurotransmitter that influences sleep and mood (Canli, 2008). Other studies implicate genes that regulate the neurotransmitter *glutamate* (Lafleur et al., 2006; Welch et al., 2007). With too much glutamate, the brain's alarm centers become overactive.

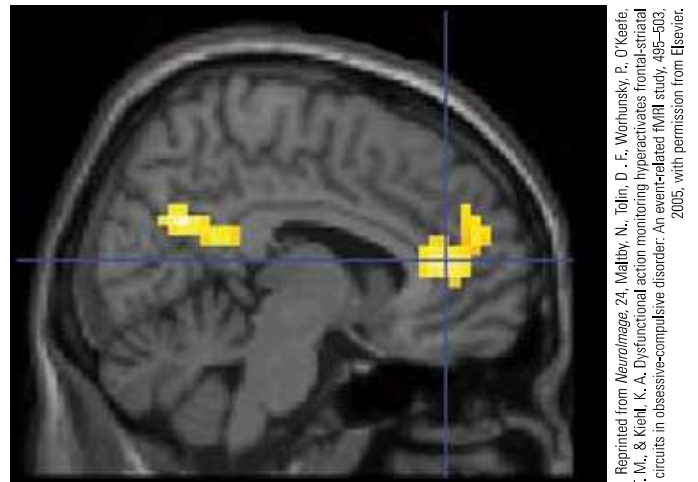
THE BRAIN

Generalized anxiety, panic attacks, PTSD, and even obsessions and compulsions are manifested biologically as an overarousal of brain areas involved in impulse control and habitual behaviors. When the disordered brain detects that something is amiss, it seems to generate a mental hiccup of repeating thoughts or actions (Gehring et al., 2000). Brain scans of people with OCD reveal elevated activity in specific brain areas during behaviors such as compulsive hand washing, checking, ordering, or hoarding (Insel, 2010; Mataix-Cols et al., 2004, 2005). As **FIGURE 66.2** shows, the *anterior cingulate cortex*, a brain region that monitors our actions and checks for errors, seems especially likely to be hyperactive in those with OCD (Maltby et al., 2005). Fear-learning experiences that traumatize the brain can also create fear circuits within the amygdala (Etkin & Wager, 2007; Kolassa & Elbert, 2007; Maren, 2007). Some antidepressant drugs dampen this fear-circuit activity and its associated obsessive-compulsive behavior.

Fears can also be blunted by giving people drugs, such as propranolol or D-Cycloserine, as they recall and then rerecord ("reconsolidate") a traumatic experience (Kindt et al., 2009; Norberg, et al., 2008). Although they don't forget the experience, the associated emotion is largely erased.

Figure 66.2

An obsessive-compulsive brain Neuroscientists Nicholas Maltby, David Tolin, and their colleagues (2005) used functional MRI scans to compare the brains of those with and without OCD as they engaged in a challenging cognitive task. The scans of those with OCD showed elevated activity in the anterior cingulate cortex in the brain's frontal area (indicated by the yellow area on the far right).



Reprinted from *NeuroImage*, 24, Maltby, N., Tolin, D. F., Worhunsky, P. O., Keefe, T. M., & Kiehl, K. A. Dysfunctional action monitoring hyperactivates frontal-striatal circuits in obsessive-compulsive disorder: An event-related fMRI study, 495–503, 2005, with permission from Elsevier.

Before You Move On

▶ ASK YOURSELF

Can you recall a fear that you have learned? What role, if any, was played by fear conditioning and by observational learning?

▶ TEST YOURSELF

How do generalized anxiety disorder, panic disorder, phobias, obsessive-compulsive disorder, and posttraumatic stress disorder differ?

Answers to the Test Yourself questions can be found in Appendix E at the end of the book.

Module 66 Review

66-1 What are the different anxiety disorders?

- Anxious feelings and behaviors are classified as an *anxiety disorder* only when they form a pattern of distressing, persistent anxiety or maladaptive behaviors that reduce anxiety.
- People with *generalized anxiety disorder* feel persistently and uncontrollably tense and apprehensive, for no apparent reason.
- In the more extreme *panic disorder*, anxiety escalates into periodic episodes of intense dread.
- Those with a *phobia* may be irrationally afraid of a specific object, activity, or situation.
- Two other disorders (obsessive-compulsive disorder and posttraumatic stress disorder) involve anxiety (though they are classified separately from the anxiety disorders).

66-2 What is obsessive-compulsive disorder?

- Persistent and repetitive thoughts (obsessions) and actions (compulsions) characterize *obsessive-compulsive disorder (OCD)*.

66-3 What is posttraumatic stress disorder?

- Symptoms of *posttraumatic stress disorder (PTSD)* include four or more weeks of haunting memories, nightmares, social withdrawal, jumpy anxiety, and sleep problems following some traumatic experience.

66-4 How do the learning and biological perspectives explain anxiety disorders, OCD, and PTSD?

- The learning perspective views anxiety disorders, OCD, and PTSD as products of fear conditioning, stimulus generalization, fearful-behavior reinforcement, and observational learning of others' fears and cognitions (interpretations, irrational beliefs, and hypervigilance).
- The biological perspective considers the role that fears of life-threatening animals, objects, or situations played in natural selection and evolution; genetic predispositions for high levels of emotional reactivity and neurotransmitter production; and abnormal responses in the brain's fear circuits.

Multiple-Choice Questions

1. What do we call an anxiety disorder marked by a persistent, irrational fear and avoidance of a specific object, activity, or situation?
 - a. Obsessive-compulsive disorder
 - b. Phobia
 - c. Panic disorder
 - d. Generalized anxiety disorder
 - e. Posttraumatic stress disorder
2. A person troubled by repetitive thoughts or actions is most likely experiencing which of the following?
 - a. Generalized anxiety disorder
 - b. Posttraumatic stress disorder
 - c. Panic disorder
 - d. Obsessive-compulsive disorder
 - e. Fear conditioning
3. The key difference between obsessions and compulsions is that compulsions involve repetitive
 - a. thoughts.
 - b. experiences.
 - c. behaviors.
 - d. memories.
 - e. concerns.

Practice FRQs

1. Name the two contemporary perspectives used by psychologists to understand anxiety disorders. Then explain how or what psychologists study within each perspective.
2. Name and describe two anxiety disorders. **(4 points)**

Answer

1 point: The learning perspective

1 point: Psychologists using the learning perspective study fear conditioning, observational learning, or cognitive processes.

1 point: The biological perspective

1 point: Psychologists using the biological perspective study natural selection, genes, or the brain.