



Module 30: Anxiety and Mood Disorders

OVERVIEW

Sections

- Anxiety Disorders
- Mood Disorders

Learning goals

Students will be able to:

- 1 Define anxiety and describe the different types of anxiety disorders.
- 2 Discuss the biological factors and the learning factors that may contribute to anxiety disorders.
- 3 Describe the different types of mood disorders.
- 4 Discuss the biological factors and the social-cognitive factors that may contribute to mood disorders.

Vocabulary Previewing Key Terms:

anxiety
generalized anxiety
disorder
panic disorder

phobia
obsessive-compulsive
disorder

posttraumatic stress
disorder

major depressive disorder
bipolar disorder

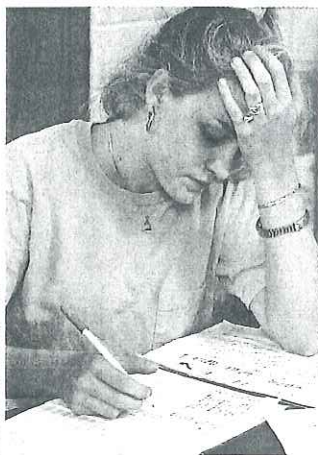
This module covers two of the most common categories of psychological disorders—anxiety disorders and mood disorders. There is little doubt that you know individuals who struggle mightily with problems related to anxiety and mood. If you are “normal,” you have probably struggled occasionally with such problems yourself.

An odd and sometimes troubling aspect of psychological disorders is that it’s easy to see the symptoms—almost all of the symptoms—in yourself. The symptoms of psychological disorders usually fall along a continuum. They can be mild, serious, or anything between. Typically, there is a “gray area” where it’s difficult to decide whether there is a significant problem. This is different from many medical conditions that are more likely to be either present or absent, with nothing between. It doesn’t make sense to talk about a woman being “kind of” pregnant, but it is surely possible to be “sort of” anxious.

So I’m going to give you the warning I was given years ago: Don’t overreact if you begin to discover in yourself the symptoms we discuss in this module. That’s typical, and there’s even a name for it—“psychology student’s disease.” The point to remember is that we all have some of these symptoms some of the time. But they don’t suggest a psychological disorder unless they meet four important criteria: symptoms must be *maladaptive* (disrupting normal functioning), *unjustifiable*, *disturbing*, and *atypical*. For most people most of the time, these symptoms do not meet these criteria. However, if you become concerned that you might be one of the many people affected by the psychological disorders we discuss in this module, you owe it to yourself to have it checked out. Talk to your parents or your guidance counselor for a referral to a mental health professional who can either lay your concerns to rest or help you resolve a problem if it does exist.

Now let’s take a look at the anxiety disorders and the mood disorders. These psychological disorders, like all others, are diagnosed according to the criteria established in the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition, text revision (DSM-IV-R) (2000). This guide identifies the symptoms that must be present for a diagnosis to be made.

Anxiety We all experience anxiety in our lives, often as a response to stressful events. Anxiety is not a disorder unless it begins to create significant difficulties in a person’s life.



Bob Daemrich/The Image Works

Anxiety Disorders

THINKING CRITICALLY What are the different types of anxiety disorders, and what are their causes?

When psychologists speak of **anxiety**, they are referring to a vague feeling of apprehension and nervousness. You’ve probably experienced anxiety in relation to specific events—big tests, school projects, or important medical tests, for example. You may also have experienced a more general anxiety, such as feeling ill at ease about the changes that college or a new job might bring or concern about how troubling world events

Anxiety Disorders

Generalized anxiety disorder

Apprehension and tenseness

Posttraumatic stress disorder

Recurrent memories and dreams of traumatic event

Panic disorder

Anxiety escalating to overwhelming panic

Obsessive-compulsive disorder

Anxiety controlled by repetitive thoughts and behaviors

Phobia

Anxiety becoming a focused fear

Figure 30.1 Anxiety Disorders

Anxiety is a major component in all anxiety disorders, although it is expressed differently in each disorder.

will play out. These are both normal types of feelings. Anxiety disorders differ from these feelings in that anxiety—or effort to control it—begins to take control and dominate life. We discuss five kinds of anxiety disorders (see Figure 30.1):

- **Generalized anxiety disorder**, marked by disruptive levels of persistent, unexplained feelings of apprehension and tenseness
- **Panic disorder**, marked by sudden bouts of intense, unexplained panic
- **Phobia**, marked by disruptive, irrational fears of objects or situations
- **Obsessive-compulsive disorder**, marked by unwanted, repetitive thoughts and actions
- **Posttraumatic stress disorder**, characterized by reliving a severely upsetting event in unwanted, recurring memories and dreams

Generalized Anxiety Disorder and Panic Disorder

Until pharmaceutical companies began a hard-sell TV ad campaign for drugs to combat *generalized anxiety disorder*, many people had never heard of this condition. It doesn't have the dramatic symptoms of many other psychological disorders and until recently escaped public attention. The drug company commercials probably leave many people uneasy because most of us have physical and psychological symptoms

anxiety

Vague feeling of apprehension or nervousness.

generalized anxiety disorder
Characterized by disruptive levels of persistent, unexplained feelings of apprehension and tenseness.

panic disorder
Characterized by sudden bouts of intense, unexplained anxiety, often associated with physical symptoms like choking sensations or shortness of breath.

phobia

Characterized by disruptive, irrational fears of objects or situations.

obsessive-compulsive disorder
Characterized by unwanted, repetitive thoughts and actions.

posttraumatic stress disorder
Characterized by reliving a severely upsetting event in unwanted, recurring memories and dreams.

Table 30.1

Symptoms of Anxiety

- Restlessness
- Feeling on edge
- Difficulty concentrating or mind going blank
- Irritability
- Muscle tension
- Sleep disturbance

Source: Adapted from APA (1994).

that characterize this disorder. However, the symptoms are more lasting for those who suffer generalized anxiety disorder and are often not attached to any specific event. Table 30.1 lists the symptoms of generalized anxiety disorder. Individuals with generalized anxiety disorder must experience at least three of these symptoms.

Sometimes the anxiety is accompanied by *panic attacks*—episodes of unexplained terror and fear that something bad is going to happen. The panic attacks, which may last several minutes, usually involve such

physical symptoms as choking sensations or shortness of breath. Have you ever experienced panic? I can recall an episode when I was about 12 years old. My parents were out and I had watched a frightening show on television. Although I had no reason to do so, I became temporarily convinced that something horrible had happened to my parents. They were fine, of course, but the panic I experienced was so intense that I still remember it clearly more than 40 years later.

We may all feel panic at some point in our lives, but imagine having these attacks several times each day. You're sitting in class, trying to take notes, and the waves of fear start to wash over you for no apparent reason. Your ability to concentrate is destroyed; all of your energy is directed toward trying to regain control. Such is the life of a person with *panic disorder*, another of the anxiety disorders.

Phobia

Almost everyone has heard the word *phobia*, which many people use to mean fear. ("I have a phobia about taking tests.") To psychologists, however, a *phobia* is more than just a fear—it is a fear that is both irrational and disruptive. If you were being stalked on a dark street late at night, your fear of the stalker would not be irrational. But note that irrational fear alone is not enough to define *phobia*—the fear must also be disruptive.

Most of us have irrational, nondisruptive fears—of harmless snakes or closed-in spaces, for example. My own particular irrational fear is the step from a ladder to a roof. Despite knowing that I can make the step safely, I hate it. I hate it to the extent that I have never been on the roof of the house in which I have lived for more than 20 years. If I were a roofer or a fireman, this fear would be disruptive. But I'm a teacher, and I seldom need to climb onto my roof. On those rare occasions when this becomes necessary, I simply have one of my sons do it or call someone else to do the job. My fear is intense and irrational, but it's not disruptive.

Ophidiophobia Even a swash-buckler like Indiana Jones is not immune to psychological disorders, in this case a phobia of snakes.



Photos 12/Alamy

Why are phobias considered anxiety disorders? Because they focus general feelings of anxiety onto a feared object or situation. Most phobias involve fear of a particular object, and their names are formed by combining the Greek word for the object with *phobia*, which is the Greek word for fear. Fear of spiders, for example, is called arachnophobia. Common (and some not so common) phobias appear in Table 30.2. Broader phobias also occur.

Social phobias produce fear in social situations. For example, some people have extreme difficulty speaking in public, even to the extent of being unable to respond to questions from a clerk in a store. Others cannot eat in the presence of others or use public restrooms. As you might imagine, social phobias can seriously impair a person's ability to lead a normal life.

Agoraphobia is fear of situations the person views as difficult to escape from if panic begins to build. Many people with this disorder become trapped in their own homes or in similar safe zones. I once had dinner with a woman from my town who was recovering from agoraphobia. She was a middle-aged widow who lived by herself and could not leave her home without experiencing intense fear. She described to me the difficulty of ordinary tasks like grocery shopping, which was to her similar to a military commando raid. Only with intense planning and determination could she leave her car, quickly collect the two or three items she needed most, and make it through checkout before dashing back to her car. Often she began to feel panicky during her few minutes in the store, and sometimes she had to abandon her grocery shopping only to face another trial the next day. Over the course of the last 15 years, she has largely conquered her agoraphobia through therapy. She was happy to say she had even been able to take a European vacation a few years ago.

Obsessive-Compulsive Disorder

The two major symptoms of obsessive-compulsive disorder are, as you might imagine, obsessions and compulsions. *Obsessions* are repetitive thoughts, and *compulsions* are repetitive actions. Almost everyone experiences both symptoms to some degree on a harmless level. In my classroom, I notice a lot of faraway stares as homecoming and prom weekends approach. I know many of these students can't stop thinking about the upcoming event (at least that was the case for me when I was a student). Other times we may hear a song and then be unable to get it out of our head.

Table 30.2

Some common—and not-so-common—phobias

These are common:

Blood	hematophobia
Darkness	nyctophobia
Enclosed space	claustrophobia
Germs	spermophobia
Heights	acrophobia
Mice	musophobia
Snakes	ophidiophobia
Spiders	arachnophobia
Wasps	spheksophobia

Phobias can develop to almost anything:

Air	aerophobia
Churches	ecclesiophobia
Eyes	ommatophobia
Frost	cryophobia
Shadows	sciophobia
Swallowing	phagophobia
Trees	dendrophobia

Source: Adapted from Melville, 1978.

Upset by Dog Germs In the 1997 film *As Good as It Gets*, Jack Nicholson plays the part of a person with obsessive-compulsive disorder.



The Everett Collection

We all have compulsions, too. One day I watched a student walk down the hall tapping the eraser of his pencil on every locker. Somehow he missed the last locker in the row and managed to make it about 10 yards down the hall before having to return to tap that last locker. You could almost feel his discomfort until the task was complete. You may have done something similar as a child. Remember that old rhyme about “step on a crack and break your mother’s back”? Were you able to step on sidewalk cracks easily after learning that rhyme?

Obsessive-compulsive tendencies can be helpful sometimes. Most good athletes are obsessed with winning and compulsive about training. And, most good students are a bit obsessed with grades and a bit compulsive about studying. These tendencies help us develop important routines, such as fastening our safety belt when we get in a car or brushing our teeth regularly.

Obsessions and compulsions, however, begin to take control with some people, and this is when helpful tendencies become obsessive-compulsive disorder. One common obsession focuses on germs and develops with a compulsion in the form of repetitive hand washing. Individuals may wash their hands hundreds of times each day. Often, they engage in a hand-washing ritual that may take many minutes to complete, much like a surgeon scrubbing up before an operation. As long as such people have the opportunity to engage in their rituals, their anxiety remains under control. If they are somehow prevented from engaging in their ritual behavior, then anxiety and panic rapidly build.

Other common patterns of obsessive-compulsive disorder involve dressing rituals, where a person may take hours to shower and dress each morning because he has hundreds of required steps that must be followed. Another common pattern is checking and rechecking a lock or an electrical switch. The person might return to the car 10 times in a

Table 30.3**Common Obsessions and Compulsions Among Children and Adolescents with Obsessive-Compulsive Disorder**

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

*Seventy children and adolescents reported their symptoms.
Source: Adapted from Rapoport, 1989.

row to make sure the lights are off and the door is locked. Table 30.3 lists some common obsessions and compulsions of children and adolescents with this disorder.

Posttraumatic Stress Disorder

What do military combat veterans, rape victims, abused children, and rescue workers who have to clean up gruesome accident sites have in common? They are all at increased risk for *posttraumatic stress disorder*. Intense stress is the trigger, and symptoms include nightmares, persistent fear, difficulty relating normally to others, and troubling memories or flashbacks of the traumatic event (American Psychiatric Association, 1994). The September 11, 2001, attacks on the World Trade Center and Pentagon were events with the potential to produce many cases of posttraumatic stress disorder, not only among those who escaped the buildings or witnessed the tragedy firsthand but also in those who followed the events on television. Children may be particularly vulnerable because witnessing or experiencing trauma may instill a sense of hopelessness about the future and may harm their ability to trust. The negative consequences of bad experiences can produce increased anxiety and other symptoms for many years.

Causes of Anxiety Disorders

Anxiety disorders could be caused by nature (the effect of our inherited biology) or nurture (the influence of our environment). As is almost always the case, both factors are important.

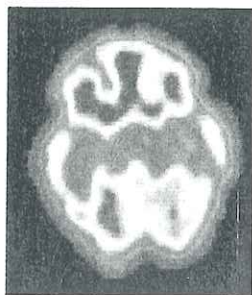


Heredity and Fear We don't appear to inherit specific fears, but we do inherit a predisposition to develop fears. This is why identical twins are more likely than other siblings to share the same fears, even if they are not raised together.

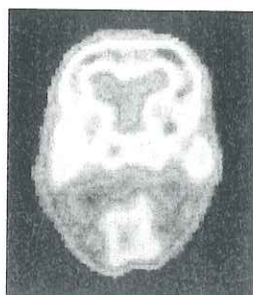
Figure 30.2 The Brain and Obsessive-Compulsive Disorder

These PET scans show the difference in brain function between a person who has obsessive-compulsive disorder (OCD) and a person who does not. The red areas on the scan on the left indicate higher-than-normal amounts of activity in the frontal lobes of the brain, a characteristic of obsessive-compulsive disorder.

From Baxter, L. R., et al. (1987). Local cerebral glucose metabolic rates in obsessive-compulsive disorder. *Archives of General Psychology*, 44(3), 211-218. Copyright © 1987 American Medical Association.



With OCD



No OCD

Biological Factors

Anxiety disorders, like so many other areas that psychologists study, illustrate the interaction between our biology and our environment. Some biological factors that contribute to anxiety disorders are these:

- **Heredity**—Some of us inherit a *predisposition*, or likelihood, for developing anxiety disorders. Evidence for this comes from studies of identical twins, who are genetically the same. Even when raised in different families, identical twins sometimes have similar phobias (Carey, 1990; Eckert & others, 1981). The influence of heredity is also apparent in monkey studies demonstrating that fearful parents are likely to have fearful children (Suomi, 1986). The specific fear is not inherited, but the predisposition to be fearful is.
- **Brain function**—Brain-scanning techniques show that people with anxiety disorders have brains that literally function differently from those of people who do not have anxiety disorders. As Figure 30.2 illustrates, brain scans show a higher degree of activity in the frontal lobes of people with obsessive-compulsive disorder (Rauch & Jenike, 1993; Resnick, 1992). Because the frontal lobes are involved with decision making, the brighter reds and yellows in that area of the brain of the person with obsessive-compulsive disorder may indicate a source of the problem. An emotion center called the amygdala also shows differences for people with phobias (Armony & others, 1998). It's possible that their intense fear is caused by the activity in the amygdala. Because brain function is involved, anxiety disorders often respond to treatment with medication.
- **Evolution**—We are likely to fear situations that posed danger to the earliest humans. Dangerous animals, heights, and storms were threats, and people who didn't have a healthy dose of fear were less likely to survive. Those who did survive passed on to us—their descendants—their tendency to fear these dangers. Many of us share these fears to this day, even though our modern world has made these threats less dangerous than they once were. Unfortunately, we don't have a similar inherited tendency to fear threats that have developed more recently. Cars, for example, kill far more people in the modern world than snake bites do, yet more people fear snakes than fear cars.

Learning Factors

Learning gone awry can also produce anxiety disorders. Sometimes we learn to respond well in stressful situations, but if we learn maladaptive responses they can blossom into anxiety disorders. These factors can contribute:

- **Conditioning**—Ivan Pavlov became famous for his studies in which dogs learned to associate the sound of a tuning fork with the taste of meat, salivating equally to both. Humans can also learn to associate fear with certain places or things. John B. Watson and Rosalie Rayner (1920) demonstrated this in their famous research with “Little Albert,” an infant who learned to fear white rats. Watson and Rayner established the fear by pairing the sight of a rat with loud, frightening noises. Few of us would deliberately teach a child fear, but the child might learn to associate fear and dogs if exposed to a menacing growl or bite when young.
- **Observational learning**—Children can also learn fears at their parents’ knees. If a child sees a parent or older sibling responding with fear to thunderstorms, bees, or high places, the child may begin to experience the same fear. Even young monkeys learned to fear snakes when given the opportunity to watch other monkeys avoid situations in which a snake is present (Mineka, 1985).
- **Reinforcement**—We also learn to associate emotions with actions, depending on the results that follow those actions. A person with a fear of heights can reduce the fear by avoiding heights. That release from anxiety makes it more likely that the person will avoid heights in the future. A person with an obsessive-compulsive hand-washing ritual can reduce anxiety by washing and will therefore repeat that action. We tend to repeat responses that have good results and avoid those that have bad results.

No one has an anxiety-free life. But when the anxiety begins to take control (as in the case of a generalized anxiety disorder), refocus as fear (as in the case of a phobia), drive us to rigidly repeated thoughts and behaviors (as in the case of obsessive-compulsive disorder), or make it impossible to escape an earlier horror (as in the case of posttraumatic stress disorder), anxiety has crossed the line and has become a psychological disorder.

THINKING CRITICALLY SUMMARY *All anxiety disorders involve feelings of apprehension and nervousness that interfere with people’s lives. Psychologists categorize anxiety disorders into several diagnoses—including generalized anxiety disorder, panic disorder, phobias, obsessive-compulsive disorder, and posttraumatic stress disorder. Anxiety disorders have biological factors (heredity and brain function) and environmental factors (learning).*



Owen Frankent/CORBIS

Nature or Nurture? The baby may be biologically predisposed to fear heights, but she may also learn this fear by watching her mother.

Mood Disorders

THINKING CRITICALLY *What are the different types of mood disorders, and what are their causes?*

Mood disorders are disturbances of emotions. Like other psychological disorders you've read about in this module, mood disorders are magnifications of our normal reactions. The magnified states in mood disorders are mania and depression. *Mania* is a period of abnormally high emotion and activity. Has anyone ever said to you, "Don't be so manic"? People often use that statement when they simply mean "Calm down—don't be so excited." Life would be dull if we could never feel elated or excited or wildly enthusiastic. But what if you felt intense mania for days or even weeks and just couldn't "come down"? As you'll see later in this section, some people do, and it's not pleasant.

Depression Anguished depression can be a normal response to tragic events. Specific criteria must be met before a diagnosis of major depressive disorder is made.



It is a rare individual who never feels depressed. Can any of us say that we never feel "down," sad, or drained of energy? Depression is a normal response to many of the things life hands us, including the death of loved ones, the end of important relationships, transitions such as the loss of a job, stress, or even graduation. We can even become depressed over distant events, such as famines

or outbreaks of violence in far corners of the world. How do we know where to draw the line between normal reaction and mood disorder? Keep this question in mind as we consider the two main mood disorders, major depressive disorder and bipolar disorder (see Figure 30.3).

Mood Disorders

Figure 30.3 Mood Disorders Such disorders are disturbances of emotion.

Major depressive disorder

Depressed mood lasting at least 2 weeks, diminished interest in activities, and other symptoms

Bipolar disorder

Alternating periods of mania and depression

Major Depressive Disorder

Major depressive disorder is the most common disability in the world, affecting almost 6 percent of men and nearly 10 percent of women (WHO, 2002). Therapists say that depression has crossed the line from a normal reaction to major depressive disorder when five of the following nine symptoms have been present for 2 or more weeks (one of the first two symptoms must be included in those five) (APA, 2000):

- Depressed mood most of the day, nearly every day (in children and adolescents, an irritated mood satisfies this requirement)
- Little interest or pleasure in almost all activities
- Significant changes in weight or appetite
- Sleeping more or less than usual
- Agitated or decreased level of activity
- Fatigue or loss of energy
- Feelings of worthlessness or inappropriate guilt
- Diminished ability to think or concentrate
- Recurrent thoughts of death or suicide

These symptoms must also produce distress or impaired functioning to qualify as indicators of major depressive disorder. One of the main differences between major depressive disorder and normal grief is the apparent reason for the emotions. Grief over the loss of a loved one is an understandable reaction. In contrast, there may be no apparent trigger for major depressive disorder.

Major depressive disorder feels like an inescapable weight affecting every aspect of life, and it can even lead to suicide (see “Psychology in the Real World: Suicide” on pages 588–589).

Bipolar Disorder

People with **bipolar disorder** (previously known as *manic depressive disorder*) alternate between the hopelessness of depression and the overexcited and unreasonably optimistic state of mania.

It's good to be optimistic, but these manic phases are well beyond normal. During mania, a person may go long periods without sleeping, may experience racing thoughts, may be easily distracted, and may set impossible goals.

These manic phases, like the bouts of depression that occur in major depressive disorder, tend to have hills and valleys. Moods generally follow cyclical patterns—most people find that they swing through some periods when they feel a little down and others where they feel great. Mania is sometimes associated with bursts of creative energy (Jamison, 1993, 1995). Many well-known creative people, from Mark Twain to Vincent van Gogh, are believed to have suffered from bipolar disorder.

major depressive disorder
Mood disorder in which a person, for no apparent reason, experiences at least 2 weeks of depressed moods, diminished interest in activities, and other symptoms, such as feelings of worthlessness.

bipolar disorder
Mood disorder (formerly called *manic depressive disorder*) in which the person alternates between the hopelessness of depression and the overexcited and unreasonably optimistic state of mania.

Vincent van Gogh It is difficult to diagnose mental illness in historical figures, but van Gogh quite possibly suffered from bipolar disorder. His life alternated between periods of blazing creativity—sometimes he finished more than a painting a day—and periods of deep depression. He committed suicide in 1890.



Burstein Collection/Corbis



Suicide

When I was a junior in high school, back in the late 1960s, a fellow student didn't appear for class one day shortly after breaking up with a longtime girlfriend. As the day wore on, rumors that he had committed suicide began to travel through the student body. The rumors proved to be true, but nobody ever dealt with the issue openly. Teachers, counselors, administrators, and parents seemed united in their desire not to talk about something they found disturbing and unexplainable. Students were left to sort out their questions and feelings on their own, and the school never even issued an official acknowledgment of what had happened.

Teen suicide rates increased during the last half of the twentieth century, although they have begun to drop off in the past decade or so (see Figure 30.4). There have also been student suicides, and suicide attempts, in the school where I now teach. Seeing this important issue brought into the open has been gratifying. In recent years, the administration put into place a crisis response plan to help both students and faculty members cope with the emotional effect of the loss or injury of a student. Instead of pretending that nothing has happened, the school issues announcements, runs articles in the school newspaper, and ensures that counselors are available to help friends with their grief and questions. Bringing the topic of suicide into the light of day may prevent others from making this tragic choice.

One interesting fact about suicide is that people who are deeply depressed rarely kill themselves until after the depression starts to lift. This is confusing to friends, because the suicide occurs just as the person seems to be becoming

better. Ironically, this lifting of depression gives the person the energy to execute a plan developed when depression was so overwhelming that it effectively stopped action.

For adolescents, to have occasional, passing thoughts of suicide is neither unusual nor a cause for concern. But becoming obsessed with thoughts of suicide, or starting to develop plans for committing suicide, is. It's quite likely that a suicide



Rob Levine/Corbis

Symptoms of Depression One symptom of depression is the diminished ability to think or concentrate. This student has difficulty concentrating on her schoolwork.

or suicide attempt of someone you know will touch your life, if it has not already done so. If you have a friend who appears deeply depressed, is preoccupied with death, begins to give away prized possessions, or talks openly about suicide, take the signs seriously. Encourage the person to seek help immediately, and consult with a parent, teacher, counselor, physician, or religious leader to make sure you have done all that you can. If you begin to feel suicidal, seek help. The dark mood will lift, and better days do lie ahead.

Consider these differences in suicide rates for different groups:

- In general, Western countries have a higher rate of suicide than non-Western countries, but there is great variation even among Western countries. The rate in England is about half the U.S. rate, and the rate in Finland is about double (WHO, 2002a).
- In most parts of the world (other than China), men are more likely than women to commit

suicide. Women, however, are at least twice as likely to *attempt* suicide. Men succeed more often because their method of choice is firearms, which are more lethal than the drug overdoses preferred by women (WHO, 2002a).

- White Americans have a higher suicide rate than other racial groups (National Institute of Mental Health, 2002).
- Suicide rates increase with age. The highest rate of suicide is among elderly men (see Figure 30.4).
- Suicide rates have been increasing over time. For 15- to 25-year-olds, the suicide rate doubled between 1960 and 1990 (Eckersley & Dear, 2002).
- There is a strong link between drug and alcohol use and suicide. The risk of suicide is 100 times greater among alcoholics (Murphy & Wetzel, 1990).

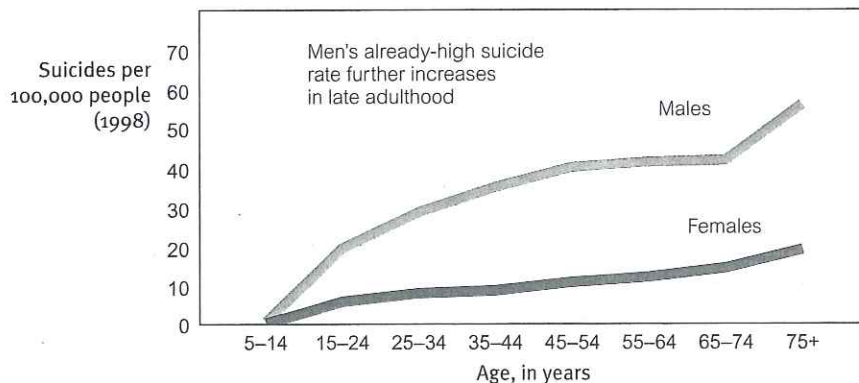


Figure 30.4 Suicide, Gender, and Age Suicide is more common among men than women at all ages. It increases with age for both men and women. (From WHO, 2002a.)

Causes of Mood Disorders

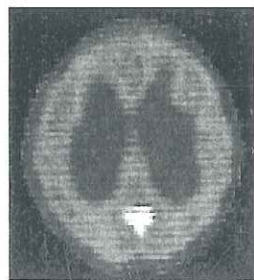
As with anxiety disorders, no single explanation sheds light on all mood disorders. Again, biology and environment interact. Stress also seems to play a role, providing a trigger that sparks mood disorders when other factors are present.

Biological Factors

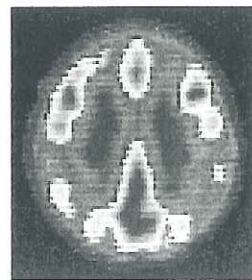
Our physical and psychological future is not written in our genes, but genetics does set limits on some of our choices. For mood disorders, both heredity and brain function appear to be important biological factors.

- **Heredity**—Many disorders run in families, and mood disorders are no exception. We can see the influence of heredity in twin studies. Genetically, fraternal twins differ from each other as much as any two other siblings. If one fraternal twin has major depressive disorder, the other twin has a 20 percent chance of developing depression. The odds are significantly higher for identical twins, who have identical genes. If one identical twin has major depressive disorder, the second twin's chances rise to about 50 percent. The trend is even more pronounced for bipolar disorder, with the second identical twin having a 70 percent chance of developing bipolar disorder if the first twin has it (Tsuang & Faraone, 1990). Note, however, that genes do not determine the disorder. For major depressive disorder, 50 percent of identical twins do *not* develop the condition. For bipolar disorder, 30 percent do not develop it.
- **Brain function**—Depressed people have depressed brains (see Figure 30.5). Positive emission tomography (PET) scan studies indicate that the brain is less active during major depression, especially in frontal lobe regions that are normally active during positive emotions (Davidson, 1999). It is also true that certain neurotransmitters—the chemical messengers that allow individual neurons in the brain to communicate with one another—appear to be out of balance in the case of mood disorders. The two neurotransmitters that are most important for depression are serotonin and norepinephrine, which are lacking during times of depression. Prozac and other antidepressant medications help restore the proper levels of these neurotransmitters.

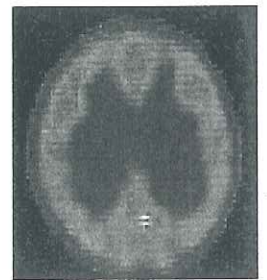
Figure 30.5 Bipolar Disorder and Brain Scans These PET scans show that mood and brain activity are correlated. The yellow and red areas of the middle scan indicate that the brain is more active during the manic phase of bipolar disorder. (Courtesy of Lewis Baxter and Michael E. Phelps, UCLA School of Medicine.)



Depressed state (May 17)



Manic state (May 18)



Depressed state (May 27)

Social-Cognitive Factors

Psychologists operating from the biological and cognitive perspectives have made tremendous progress explaining behavior and mental processes in recent years. In addition to the biological influences described in the previous paragraphs, researchers have identified a number of important social and cognitive influences. Psychologists look closely at the interplay among the way we think, the situations we find ourselves in, and the way we feel. These social and cognitive factors actually affect brain chemistry and are affected by it. Complicated? Yes, but mood disorders are complex, and we would be unrealistic to expect simple explanations for these conditions. Consider a few social-cognitive influences:

1. *Learned helplessness*—People develop a sense of helplessness when subjected to unpleasant events over which they have little or no control. As they acquire this feeling of helplessness, they give up and no longer try to improve their situation because they learned in the past that efforts to improve the situation will not work. This alone can produce depression. Learned helplessness may be one reason women suffer higher rates of depression than men do. Compared with men, women are more likely to be abused, stressed, and overwhelmed (Hankin & Abramson, 2001; Mazure & others, 2002).
2. *Attributions*—When things go wrong, we try to explain them. These explanations, or attributions, can vary from person to person. It turns out that depressed people are likely to make attributions with the following characteristics (see Figure 30.6):
 - *Stable*—The bad situation will last a long time.
 - *Internal*—This happened because of my actions, not because of the actions of someone else and not because of the circumstances.
 - *Global*—My explanation applies to many areas of my life.



Jaime Puebla/AP/Wide World Photos

Learned Helplessness When people find themselves in unpleasant situations over which they have little control (like this woman doing tedious, poorly paid factory work) learned helplessness can set in. This, in turn, is associated with depression.

WHY WERE YOU FIRED?

Associated with depression

Stable

"I am a bad person"

Internal

"It was all my fault"

Global

"I mess everything up"

Not associated with depression

Not stable

"I say things I don't mean when I'm tired"

External

"Yesterday was a really bad day"

Specific

"I make mistakes when I rush"

Figure 30.6 Attributions and Depression

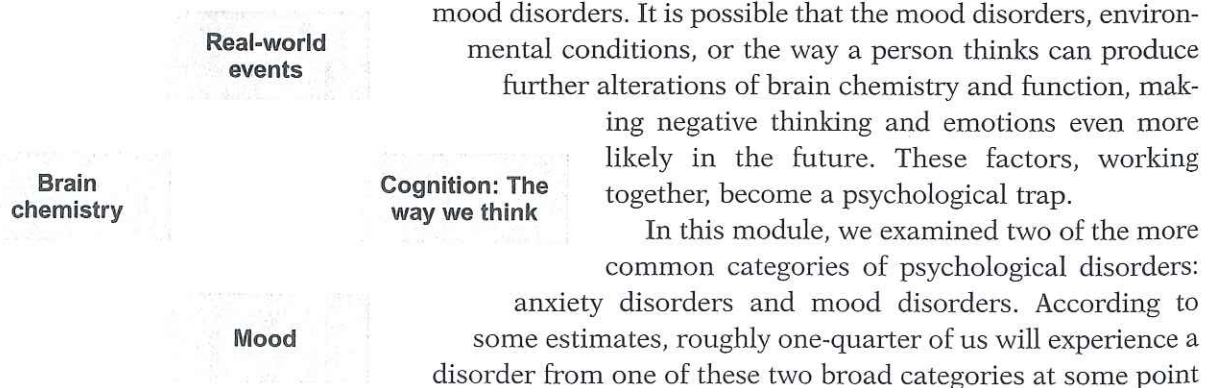
How we explain events—such as losing a job—is associated with depression. People with depression are likely to explain events with stable, internal, and global statements.

If I fail a history test and explain this by saying, "I'm stupid," I've met all these conditions. This attribution is stable (stupidity doesn't come and go, it stays with me), internal (stupidity is a personal characteristic), and global (being stupid affects most of the things I do). One theory (Abramson & others, 1989) says that these attributions lead to a sense of hopelessness that produces depression.

Notice that this sense of hopelessness is less likely if attributions change. If I say I failed a history test because I was sick that day, even though being sick is internal and global, my explanation is not stable (I haven't said I'll *always* be sick). Thus, I'm less likely to feel hopeless and depressed. If I say I failed the history test because I have a bad teacher, my attribution is not internal—I haven't taken personal responsibility. Again, I avoid depression. Teaching people to change their attributions can be an effective way of treating depression.

Figure 30.7 What Determines Mood?

Mood flows from a complex interaction of biological and social-cognitive factors. These factors influence one another and are influenced by external events and internal moods. Attempts to improve mood can focus on controlling the environment, prescribing medications to change brain chemistry, or changing the way the person thinks.



All these factors, biological and social cognitive, can interact to form a vicious cycle of depression (see Figure 30.7). A person's heredity might predispose depression by allowing the balance of neurotransmitters to operate in a range associated with mood disorders or by "programming" the brain to function differently. The environment might be stressful and full of situations over which a person has little control. This might produce learned helplessness and discouragement, which—combined with attributions that are stable, global, and internal—pave the way to mood disorders. It is possible that the mood disorders, environmental conditions, or the way a person thinks can produce further alterations of brain chemistry and function, making negative thinking and emotions even more likely in the future. These factors, working together, become a psychological trap.

In this module, we examined two of the more common categories of psychological disorders: anxiety disorders and mood disorders. According to some estimates, roughly one-quarter of us will experience a disorder from one of these two broad categories at some point

in our life (Robins & Regier, 1991). Researchers have begun to unravel the complicated story of what causes anxiety and mood disorders. As they continue to make progress, even more effective treatment options will become available to help those who suffer from these widespread conditions.

THINKING CRITICALLY SUMMARY *People suffering from major depressive disorder experience a dramatically depressed mood; their sleep, activities, concentration, appetite are affected as well, and they may experience recurring thoughts about suicide. People suffering from bipolar disorder alternate between the hopelessness of depression and the overexcited state of mania. Research shows that both biological factors (heredity and brain function) and social-cognitive factors (the way we think about situations) influence the development of mood disorders.*

Module 30: Thinking About Anxiety and Mood Disorders

LEARNING GOAL 1: Define anxiety and describe the different types of anxiety disorders.

- Anxiety is a vague feeling of apprehension and nervousness.
- Generalized anxiety disorder is marked by disruptive levels of persistent, unexplained feelings of apprehension and tenseness.
- Panic disorder is marked by sudden bouts of intense, unexplained panic.
- Phobia is marked by disruptive, irrational fears of objects or situations.
- Obsessive-compulsive disorder is marked by unwanted, repetitive thoughts and actions. Obsessions are repetitive thoughts. Compulsions are repetitive actions.
- Posttraumatic stress disorder is characterized by reliving a severely upsetting event in unwanted, recurring memories and dreams.

LEARNING GOAL 2: Discuss the biological factors and the learning factors that may contribute to anxiety disorders.

- Several biological factors may contribute to anxiety disorders, including heredity, brain function, and evolution and natural selection.
- People may learn maladaptive responses that can blossom into anxiety disorders. These include associating fear with certain places or things (conditioning), learning fear or anxiety responses by watching others experience them (observation-

al learning), and learning to associate emotions with actions and the results that follow those actions (reinforcement or punishment).

LEARNING GOAL 3: Describe the different types of mood disorders.

- Mood disorders are disturbances of emotions involving magnifications of normal moods (depression or mania).
- Major depressive disorder is diagnosed when five of the following nine symptoms are present for 2 or more weeks: depressed mood most of the day, little interest in activities, changes in appetite, changes in sleep, changes in activity level, fatigue, feelings of worthlessness, inability to concentrate, and recurrent thoughts of suicide.
- People with bipolar disorder alternate between the hopelessness of depression and the overexcited and unreasonably optimistic state of mania.

LEARNING GOAL 4: Discuss the biological factors and the social-cognitive factors that may contribute to mood disorders.

- Several biological factors may contribute to anxiety disorders, including heredity and brain function.
- Researchers have identified a number of important social and cognitive influences on the development of mood disorders, including the way we think (attributions) and the situations in which we find ourselves (as with learned helplessness).

Check Your Vocabulary

For each definition, choose the best-matching term from the list that follows.

Definitions

- ___ 1. Mood disorder in which a person, for no apparent reason, experiences at least 2 weeks of depressed moods, diminished interest in activities, and other symptoms, such as feelings of worthlessness.
- ___ 2. Mood disorder (formerly called *manic depressive disorder*) in which the person alternates between the hopelessness of depression and the overexcited and unreasonably optimistic state of mania.
- ___ 3. Vague feeling of apprehension or nervousness.
- ___ 4. Characterized by disruptive levels of persistent, unexplained feelings of apprehension and tenseness.
- ___ 5. Characterized by disruptive, irrational fears of objects or situations.

- ___ 6. Characterized by reliving a severely upsetting event in unwanted, recurring memories and dreams.
- ___ 7. Characterized by sudden bouts of intense, unexplained anxiety, often associated with physical symptoms like choking sensations or shortness of breath.
- ___ 8. Characterized by unwanted, repetitive thoughts and actions.

Terms

- a. anxiety
- b. bipolar disorder
- c. generalized anxiety disorder
- d. major depressive disorder
- e. obsessive-compulsive disorder
- f. panic disorder
- g. phobia
- h. posttraumatic stress disorder

Apply Your Knowledge

- 1. Kristi panics whenever she sees a spider. Which of the following disorders best fits Kristi's problem?
 - a. Posttraumatic stress disorder
 - b. Phobia
 - c. Bipolar disorder
 - d. Generalized anxiety disorder
- 2. Every morning, Cindy taps her alarm clock, her toaster, and her coffee cup exactly 30 times. If she can't perform her ritual, she feels anxious. Which of the following disorders fits Cindy's symptoms best?
 - a. Obsessive-compulsive disorder
 - b. Bipolar disorder
 - c. Phobia
 - d. Posttraumatic stress disorder
- 3. All of a sudden, Roberto started sweating, his heart started racing, and he felt like he couldn't breathe. Which of the following fits Roberto's symptoms best?
 - a. Posttraumatic stress disorder
 - b. Bipolar disorder
 - c. Panic attack
 - d. Obsessive-compulsive disorder
- 4. Which of the following findings is the best evidence for a genetic predisposition for developing anxiety disorders?
 - a. In the "Little Albert" demonstration, John B. Watson and Rosalie Rayner established fear by pairing the sight of a rat with loud, frightening noises.
 - b. Bipolar disorder tends to run in families, especially if the mother is diagnosed with the illness.
 - c. Children can learn fears and anxieties demonstrated by their parents through observational learning.
 - d. Even when raised in different families, identical twins sometimes have similar phobias.
- 5. Baghya experiences intense fear whenever she boards an airplane and feels relieved whenever she avoids boarding an airplane. This is an example of how environment affects anxiety and behaviors through

- a. heredity.
 - b. observational learning.
 - c. reinforcement.
 - d. evolution.
6. Which of the following is the most common mood disorder?
- a. Major depressive disorder
 - b. Obsessive-compulsive disorder
 - c. Posttraumatic stress disorder
 - d. Bipolar disorder
7. Which of the following factors might indicate that a person's depression has crossed the line from a normal reaction to major depressive disorder?
- a. Depressed mood in response to a life event, such as a starting a new job
 - b. Changes in appetite, energy level, and ability to concentrate
 - c. Depression triggered by trauma or loss of a member of the family
 - d. Physical symptoms such as choking sensations or shortness of breath
8. Avin came out of a period of intense depression but now goes without sleeping, has racing thoughts, and sets impossible goals for himself. Avin may be experiencing
- a. the "major" period of his major depressive episode.
 - b. an anxiety disorder with mood implications.
 - c. the manic phase of bipolar disorder.
 - d. a mood disorder known as posttraumatic stress disorder.
9. Which of the following statements is most accurate about how heredity contributes to the development of a mood disorder?
- a. Research indicates that environment is mostly responsible for developing mood disorders and genetics plays only a minor part.
 - b. Many studies indicate a much higher risk for mood disorders for people with close genetic relatives who develop these disorders.
 - c. Observational learning studies indicate that the heredity of the mother influences major depressive disorder but not bipolar disorder.
 - d. Twins studies show that obsessive-compulsive disorder runs in families, indicating that genetics is a strong influence on mood disorders.
10. Psychologists who look for the effects on the development of mood disorders of the way we think, the situations we find ourselves in, and the way we feel are searching for _____ factors that may influence the development of a mood disorder.
- a. genetic
 - b. observational
 - c. conditioning-reinforcement
 - d. social-cognitive

Writing About Psychology

In a short essay (about a page), pick one anxiety disorder and one mood disorder to analyze. In your essay, explain the major symptoms of the disorder and

how it might affect a young person attending high school. For each disorder, explain at least two potential causes (based on research presented in the module).

Reviewing Key Terms

anxiety, p. 578

generalized anxiety disorder, p. 579

panic disorder, p. 579

phobia, p. 579

obsessive-compulsive disorder, p. 579

posttraumatic stress disorder, p. 579

major depressive disorder, p. 587

bipolar disorder, p. 587