Overview to Understanding Abnormal Behavior

OUTLINE

Learning Objectives

1.1 Distinguish between normal but unusual behavior and between unusual but abnormal behavior.

1.2 Understand how explanations of abnormal behavior have changed through time.

1.3 Articulate the strengths and weaknesses of research methods.

1.4 Describe types of research studies.

CHAPTER 1

Case Report: Rebecca Hasbrouck

Demographic information: 18-year-old Caucasian female.

Presenting problem: Rebecca self-referred to the university psychotherapy clinic. She is a college freshman, living away from home for the first time. After the first week of school, Rebecca reports that she is having trouble sleeping, is having difficulty concentrating in her classes, and often feels irritable. She is frustrated by the difficulties of her coursework and states she is worried that her grades are beginning to suffer. She also reports that she is having trouble making friends at school and that she has been feeling lonely because she has no close friends here with whom she can talk openly. Rebecca is very close to her boyfriend of three years, though they have both started attending college in different cities. She was tearful throughout our first session, stating that, for the first time in her life, she feels overwhelmed by feelings of sadness. She reports that although the first week at school felt like "torture," she is slowly growing accustomed to her new lifestyle, but she still struggles with missing her family and boyfriend, as well as her friends from high school.

Relevant past history: Rebecca has no family history of psychological disorders. She reported that sometimes her mother tends to get "really stressed out" though she has never received treatment for this.

Symptoms: Depressed mood, difficulty falling asleep (insomnia), difficulty concentrating on schoolwork. She reported no suicidal ideation.

Case formulation: Although it appeared at first as though Rebecca was suffering from a major depressive episode, she did not meet the diagnostic criteria. In order to qualify as a major depressive episode, individuals must display at least five out of the nine criteria, and she only displayed three (insomnia, depressed mood, and difficulty concentrating). While the age of onset for depression tends to be around Rebecca's age, given her lack of a family history of depression and that her symptoms were occurring in response to a major stressor, the clinician determined that Rebecca was suffering from an Adjustment Disorder with depressed mood.

Treatment plan: The counselor will refer Rebecca for psychotherapy. Therapy should focus on improving her mood, and also should allow her a space to discuss her feelings surrounding the major changes that have been occurring in her life.

Sarah Tobin, PhD
Clinician

Rebecca Hasbrouck's case report summarizes the pertinent features that a clinician would include when first seeing a client after an initial evaluation. Each chapter of this book begins with a case report for a client whose characteristics are related to the chapter's topic. A fictitious clinician, Dr. Sarah Tobin, who supervises a clinical setting that offers a variety of services, writes the case reports. In some instances, she provides the services, and in others, she supervises the work of another psychologist. For each case, she provides a diagnosis using the official manual adopted by the profession known as *The Diagnostic and Statistical Manual of Mental Disorders, Fourth Text Revision (DSM-IV-TR)* (American Psychiatric Association, 2000).

At the end of the chapter, after you have developed a better understanding of the client's disorder, we will return to Dr. Tobin's description of the treatment results and expected future outcomes for the client. We also include Dr. Tobin's personal reflections on the case so that you will gain insight into the clinician's experience in working with psychologically disordered individuals.

The field of abnormal psychology is filled with countless fascinating stories of people who suffer from psychological disorders. In this chapter, we will try to give you some sense of the reality that psychological disturbance is certain to touch everyone, to some extent, at some point in life. As you progress through this course, you will almost certainly develop a sense of the challenges people associate with psychological problems. You will find yourself drawn into the many ways that mental health problems affect the lives of individuals, their families, and society. In addition to becoming more personally exposed to the emotional aspects of abnormal psychology, you will learn about the scientific and theoretical basis for understanding and treating the people who suffer from psychological disorders.

This young woman's apparent despair may be the symptoms of a psychological disorder.

1.1 What Is Abnormal Behavior?

It's possible that you know someone very much like Rebecca, who is suffering from more than the average degree of adjustment difficulties in college. Would you consider that person psychologically disturbed? Would you consider giving this person a diagnosis? What if a person you knew was not only depressed, but also showed up on your floor seemingly ready to harm herself? At what point do you draw the line between someone who has a psychological disorder and someone who, like Rebecca, has an adjustment disorder? Is it even necessary to give Rebecca any diagnosis at all? Questions about normality and abnormality such as these are basic to our understanding of psychological disorders.

Conditions like Rebecca's are likely to affect you in a very personal way. Perhaps you have been unusually depressed, fearful, or anxious, or maybe the emotional distress has been a step removed from you: Your father struggles with alcoholism, your mother has been hospitalized for severe depression, a sister has an eating disorder, or your brother has an irrational fear. If you have not encountered a psychological disorder within your immediate family, you have very likely encountered one in your extended family and circle of friends. You may not have known the formal psychiatric diagnosis for the problem, and you may not have understood its nature or cause, but you knew that something was wrong and recognized the need for professional help.

Until they are forced to face such problems, most people believe that "bad things" happen only to other people. Other people have car accidents, succumb to cancer, or become severely depressed.

We hope that reading this textbook will help you go beyond this "other people" syndrome. Psychological disorders are part of the human experience, touching the life—either directly or indirectly—of every person. As you read about these disorders and the people who suffer with them, you will find that most of these problems are treatable, and many are preventable.

1.2 The Social Impact of Psychological Disorders

Put yourself in the following situation. An urgent message awaits you from Jeremy's mother. Your best friend in high school, Jeremy has just been admitted to a psychiatric hospital and begs to see you, because only you can understand what he is going through. You are puzzled and distressed by this news. You had no idea that he had any psychological problems. What will you say to him? Can you ask him what's wrong? Can you ask him how he feels? Do you dare inquire about what his doctors have told him about his chances of getting better? What will it be like to see him in a psychiatric hospital? Do you think you could be friends with someone who has spent time in such a place?

Now imagine the same scenario, but instead you receive news that Jeremy was just admitted to the emergency room of a general hospital with an acute appendicitis. You know exactly how to respond when you go to see him. You will ask him how he feels, what exactly is wrong with him, and when he will be well again. Even though you might not like hospitals very much, at least you have a pretty good idea about what hospital patients are like. It does not seem peculiar to imagine Jeremy as a patient in this kind of hospital. It would probably be much easier for you to understand and accept your friend's physical illness than his psychological disorder, and you would probably not even consider whether you could be friends with him again after he is discharged.

People with psychological disorders often face situations like Jeremy's in which the people close to them aren't sure how to respond to their symptoms. Even worse, they experience profound and long-lasting emotional and social effects even after their

The family of individuals with psychological disorders face significant stress when their relatives must be hospitalized.

symptoms are brought under control and they can resume their former lives. They also must cope with the personal pain associated with the disorder itself. Think about Rebecca and her unhappiness. Rather than enjoying her newly found independence while at college like her classmates, she is experiencing extreme amounts of sadness and loneliness. She is unable to focus on her studies, make new friends, or even sleep.

Social attitudes toward people with psychological disorders range from discomfort to outright prejudice. Language, humor, and stereotypes all portray psychological disorders in a negative light and people often fear that people suffering from these disorders are violent and dangerous. There seems to be something about a psychological disorder that makes people want to distance themselves from it as much as possible. The result of these stereotypes is social discrimination, which only serves to complicate the lives of the afflicted even more.

In the chapters that follow, you will read about a wide range of disorders involving mood, anxiety, substance abuse, sexuality, and thought disturbance. The case descriptions will give you a glimpse into the feelings and experiences of people who have these disorders, and you may find that some of these individuals seem similar to you or to people you know. As you read about the disorders, put yourself in the place of the people who have these conditions. Consider how they feel and how they would like people to treat them. We hope that you will realize that our discussion is not about disorders, but about the people with these disorders.

1.3 Defining Abnormality

How would you define abnormal behavior? Read the following examples. Which of these behaviors do you regard as abnormal?

- Finding a "lucky" seat in an exam
- Inability to sleep, eat, study, or talk to anyone else for days after a lover says, "It's over between us"
- Breaking into a cold sweat at the thought of being trapped in an elevator
- Swearing, throwing pillows, and pounding fists on the wall in the middle of an argument with a roommate
- Refusing to eat solid food for days at a time in order to stay thin
- Engaging in a thorough hand-washing after coming home from a bus ride
- Believing that the government has agents who are eavesdropping on telephone conversations
- Drinking a six-pack of beer a day in order to be "sociable" with friends after work

If you're like most people, you probably found it difficult to decide between normal and abnormal. It is surprisingly difficult to make this distinction, but it is important to establish some criteria for abnormality.

The mental health community currently uses diagnostic procedures to decide on whether a given individual fits the criteria for abnormality. There are currently five criteria for a psychological disorder. The first is that of "clinical significance," meaning that the behavior involves a measurable degree of impairment. Second, the individual must be experiencing distress or must be engaging in behaviors that present the risk of death, hospitalization, or incarceration. Third, the individual's behavior cannot be a socially expectable response to a particular event such as the death of a close friend or relative. Fourth, the behavior must be linked to some underlying disturbance within the individual, whether psychological or biological. Fifth, the individual's behavior cannot be defined solely in terms of social rebellion or deviance. Thus, in some oppressive political symptoms, people were "diagnosed" as having a psychological disorder when in reality, the government sought to find a way to silence protestors.

This young woman is distressed over her inability to fall asleep, but does this mean she has a psychological disorder?

1.4 What Causes Abnormal Behavior?

However defined, we can best conceptualize abnormal behavior from multiple perspectives that incorporate biological, psychological, and sociocultural factors.

Biological Causes

The biological domain includes genetic and environmental influences on physical functioning. People with psychological disorders may inherit a predisposition to developing behavioral disturbances. Of particular interest are inherited factors that alter the functioning of the nervous system. There are also physiological changes that affect behavior, which other conditions in the body cause, such as brain damage or exposure to harmful environmental stimuli. For example, a thyroid abnormality can cause a person's moods to fluctuate widely. Brain damage resulting from a head trauma can result in aberrant thought patterns. Toxic substances or allergens in the environment can also cause a person to experience disturbing emotional changes and behavior.

Psychological Causes

Psychological causes of abnormal behavior involve disturbances in thoughts and feelings. As you will learn in this book, there are a variety of alternative explanations of abnormal behavior that focus on factors such as past learning experiences, maladaptive thought patterns, and difficulties coping with stress. The varying theoretical perspectives within abnormal psychology reflect differences in assumptions about the underlying causes of human behavior. Treatment models based on these theoretical perspectives reflect these varying assumptions.

Sociocultural Causes

The term *sociocultural* refers to the various circles of influence on the individual ranging from close friends and family to the institutions and policies of a country or the world as a whole. Discrimination, whether based on social class, income, race and ethnicity, or

TABLE 1.1 Causes of Abnormal Behavior

Biological	Genetic inheritance
	Physiological changes
	Exposure to toxic substances
Psychological	Past learning experiences
	Maladaptive thought patterns
	Difficulties coping with stress
Sociocultural	Social policies
	Discrimination
	Stigma

gender, can influence the development of abnormal behavior. For people who are diagnosed with a psychological disorder, social stigmas associated with being "mental patients" can further affect their symptoms. A **stigma** is a label that causes us to regard certain people as different, defective, and set apart from mainstream members of society. In addition to increasing the burden for them and for their loved ones, a stigma deters people from obtaining badly needed help, and thereby perpetuates a cycle in which many people in need become much worse. The stigma of psychological disorders affects people from ethnic and racial minorities more severely than those from mainstream society. For example, European-American adolescents and their caregivers are twice as likely as members of minority groups to define problems in mental health terms or to seek help for such problems (Roberts, Alegría, Roberts, & Chen, 2005).

stigma
A label that causes certain people to be regarded as different, defective, and set apart from mainstream members of society.

The Biopsychosocial Perspective

Table 1.1 summarizes the three categories of the causes of abnormality. Disturbances in any of these areas of human functioning can contribute to the development of a psychological disorder. However, we cannot so neatly divide the causes of abnormality. There is often considerable interaction among the three sets of influences.

Social scientists use the term **biopsychosocial** to refer to the interaction in which biological, psychological, and sociocultural factors play a role in the development of an individual's symptoms. The biopsychosocial perspective incorporates a developmental viewpoint. This means that individuals must be seen as changing over time. Biopsychosocial factors interact to alter the individual's expression of behavioral patterns over time. Thus, it is important to examine early risk factors that make an individual vulnerable to developing a disorder. Similarly, risk factors may vary according to the indi vidual's position in the life span (Whitbourne & Meeks, 2011).

biopsychosocial
A model in which the interaction of biological, psychological, and sociocultural factors is seen as influencing the development of the individual.

As you will see when reading about the conditions in this textbook, the degree of influence of each of these variables differs from disorder to disorder. For some disorders, such as schizophrenia, biology plays a dominant role. For other disorders, such as stress reactions, psychological factors predominate. For other conditions, such as posttraumatic stress disorder, that result, for example, from experiences under a terrorist regime, the cause is primarily sociocultural.

However, certain life experiences can protect people from developing conditions to which they are vulnerable. Protective factors, such as loving caregivers, adequate health care, and early life successes, reduce vulnerability considerably. In contrast, low vulnerability can heighten when people receive inadequate health care, engage in risky behaviors (such as using drugs), and get involved in dysfunctional relationships. The bottom line is that we can best conceptualize abnormal behavior as a complex interaction among multiple factors.

Hieronymous Bosch's *Removal of the Stone of Folly* depicted a medieval "doctor" cutting out the presumed source of madness from a patient's skull. The prevailing belief was that spiritual possession was the cause of psychological disorder.

The Greeks sought advice from oracles, wise advisors who made pronouncements from the gods.

1.5 Prominent Themes in Abnormal Psychology throughout History

The greatest thinkers of the world, from Plato to the present day, have attempted to explain the varieties of human behavior that constitute abnormality. Three prominent themes in explaining psychological disorders recur throughout history: the spiritual, the scientific, and the humanitarian. **Spiritual explanations** regard abnormal behavior as the product of possession by evil or demonic spirits. **Humanitarian explanations** view psychological disorders as the result of cruelty, stress, or poor living conditions. **Scientific explanations** look for causes that we can objectively measure, such as biological alterations, faulty learning processes, or emotional stressors.

spiritual explanations
Regard psychological disorders as the product of possession by evil or demonic spirits.

humanitarian explanations
Regard psychological disorders as the result of cruelty, stress, or poor living conditions.

scientific explanations
Regard psychological disorders as the result of causes that we can objectively measure, such as biological alterations, faulty learning processes, or emotional stressors.

Spiritual Approach

The earliest approach to understanding abnormal behavior is spiritual; the belief that people showing signs of behavioral disturbance were possessed by evil spirits. Archeological evidence dating back to 8000 B.C. suggests that the spiritual explanation was prevalent in prehistoric times. Skulls of the living had holes cut out of them, a process called "trephining," apparently in an effort to release the evil spirits from the person's head (Maher & Maher, 1985). Archeologists have found evidence of trephining from many countries and cultures, including the Far and Middle East, the Celtic tribes in Britain, ancient and recent China, India, and various peoples of North and South America, including the Mayans, Aztecs, Incas, and Brazilian Indians (Gross, 1999).

Another ancient practice was to drive away evil spirits through the ritual of exorcism, a physically and mentally painful form of torture carried out by a shaman, priest, or medicine man. Variants of shamanism have appeared throughout history. The Greeks sought advice from oracles who they believed were in contact with the gods. The Chinese practiced magic as a protection against demons. In India, shamanism flourished for centuries, and it still persists in Central Asia.

In this modern-day re-enactment of the Salem Witchcraft trials, a woman is tortured for her supposed crimes.

During the Middle Ages, people widely practiced magical rituals and exorcism, and administered folk medicines. Society considered people with psychological difficulties sinners, witches, or embodiments of the devil, and they were punished severely. Malleus Malificarum, an indictment of witches written by two Dominican monks in Germany in 1486, became the Church's justification for denouncing witches as heretics and devils whom it had to destroy in the interest of preserving Christianity. The Church recommended "treatments" such as deportation, torture, and burning at the stake. Women were the main targets of persecution. Even in the late 1600s in colonial America, the Puritans sentenced people to burning at the stake, as evidenced by the famous Salem Witchcraft trials.

Dorothea Dix was a Massachusetts reformer who sought to improve the treatment of people with psychological disorders in the mid-1800s.

Humanitarian Approach

The humanitarian approach developed throughout history, in part as a reaction against the spiritual approach and its associated punishment of people with psychological disorders. Poorhouses and monasteries became shelters, and although they could not offer treatment, they provided some protective measures. Unfortunately, these often became overcrowded, and rather than provide protection themselves, they became places where abuses occurred. For example, society widely believed that psychologically disturbed people were insensitive to extremes of heat and cold, or to the cleanliness of their surroundings. Their "treatment" involved bleeding, forced vomiting, and purging. It took a few courageous people, who recognized the inhumanity of the existing practices, to bring about sweeping reforms. By the end of the eighteenth century, hospitals in France, Scotland, and England attempted to reverse these harsh practices. The idea of "moral treatment" took hold—the notion that people could develop self-control over their behaviors if they had a quiet and restful environment. Institutions used restraints only if absolutely necessary, and even in those cases the patient's comfort came first.

Conditions in asylums again began to worsen in the early 1800s as facilities suffered from overcrowding and staff resorted to physical punishment to control the patients. In 1841, a Boston schoolteacher named Dorothea Dix (1802–1887) took up the cause of reform. Horrified by the inhumane conditions in the asylums, Dix appealed to the Massachusetts Legislature for more state-funded public hospitals to provide humane treatment for mental patients. From Massachusetts, Dix spread her message throughout North America and Europe.

Although deinstitutionalization was designed to enhance the quality of life for people who had been held years in public psychiatric hospitals, many individuals left institutions only to find a life of poverty and neglect on the outside.

Over the next 100 years, governments built scores of state hospitals throughout the United States. Once again, however, it was only a matter of time before the hospitals became overcrowded and understaffed. It simply was not possible to cure people by providing them with the well-intentioned, but ineffective, interventions proposed by moral treatment. However, the humanitarian goals that Dix advocated had a lasting influence on the mental health system. Her work was carried forward into the twentieth century by advocates of what became known as the mental hygiene movement.

Until the 1970s, despite the growing body of knowledge about the causes of abnormal behavior, the actual practices in the day-to-day care of psychologically disturbed people were sometimes as barbaric as those in the Middle Ages. Even people suffering from the least severe psychological disorders were often housed in the "back wards" of large and impersonal state institutions, without adequate or appropriate care. Institutions restrained patients with powerful tranquilizing drugs and straitjackets, coats with sleeves long enough to wrap around the patient's torso. Even more radical was the indiscriminate use of behavior-altering brain surgery or the application of electrical shocks—so-called treatments that were punishments intended to control unruly patients (see more on these procedures in Chapter 2).

Public outrage over these abuses in mental hospitals finally led to a more widespread realization that mental health services required dramatic changes. The federal government took emphatic action in 1963 with the passage of groundbreaking legislation. The Mental Retardation Facilities and Community Mental Health Center Construction Act of that year initiated a series of changes that would affect mental health services for decades to come. Legislators began to promote policies designed to move people out of institutions and into less restrictive programs in the community, such as vocational rehabilitation facilities, day hospitals, and psychiatric clinics. After their discharge from the hospital, people entered halfway houses, which provided a supportive environment in which they could learn the necessary social skills to re-enter the community. By the mid-1970s, the state mental hospitals, once overflowing with patients, were practically deserted. These hospitals freed hundreds of thousands of institutionally confined people to begin living with greater dignity and autonomy. This process, known as the deinstitutionalization movement, promoted the release of psychiatric patients into community treatment sites.

Unfortunately, the deinstitutionalization movement did not completely fulfill the dreams of its originators. Rather than abolishing inhumane treatment, deinstitutionalization created another set of woes. Many of the promises and programs hailed as alternatives to institutionalization ultimately failed to come through because of inadequate

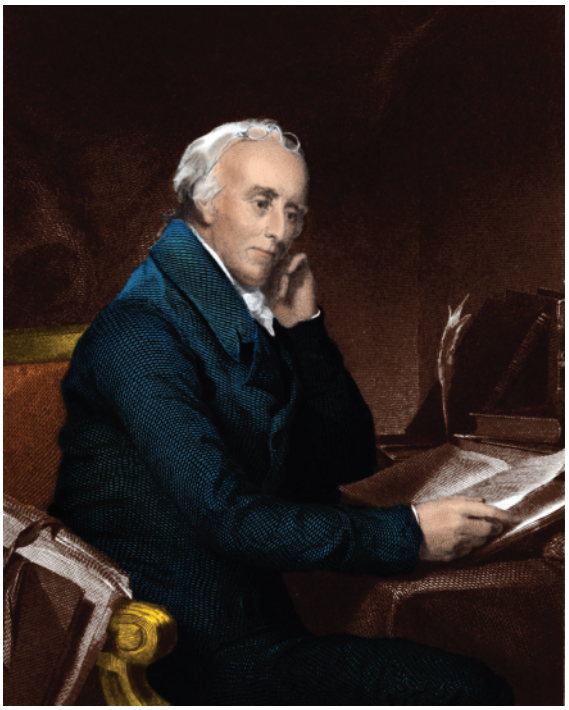
Table 1.2 Healthy People 2020 Goals

In late 2010, the U.S. government's Healthy People project released goals for the coming decade. These goals are intended both to improve the psychological functioning of individuals in the U.S. and to expand treatment services.

- Reduce the suicide rate.
- Reduce suicide attempts by adolescents.
- Reduce the proportion of adolescents who engage in disordered eating behaviors in an attempt to control their weight.
- Reduce the proportion of persons who experience major depressive episodes.
- Increase the proportion of primary care facilities that provide mental health treatment onsite or by paid referral.
- Increase the proportion of children with mental health problems who receive treatment.
- Increase the proportion of juvenile residential facilities that screen admissions for mental health problems.
- Increase the proportion of persons with serious mental illness (SMI) who are employed.
- Increase the proportion of adults with mental disorders who receive treatment.
- Increase the proportion of persons with co-occurring substance abuse and mental disorders who receive treatment for both disorders.
- Increase depression screening by primary care providers.
- Increase the proportion of homeless adults with mental health problems who receive mental health services.

SOURCE: http://www.healthypeople.gov/2020/topicsobjectives2020/pdfs/MentalHealth.pdf

planning and insufficient funds. Patients shuttled back and forth between hospitals, halfway houses, and shabby boarding homes, never having a sense of stability or respect. Although the intention of releasing patients from psychiatric hospitals was to free people who had been deprived of basic human rights, the result may not have been as liberating as many had hoped. In contemporary American society, people who would have been in psychiatric hospitals four decades ago are moving through a circuit of shelters, rehabilitation programs, jails, and prisons, with a disturbing number of these individuals spending long periods of time as homeless and marginalized members of society.



Dr. Benjamin Rush, founder of American psychiatry, was an ardent reformer who promoted the scientific study of psychological disorders.

Contemporary advocates of the humanitarian approach suggest new forms of compassionate treatment for people who suffer from psychological disorders. These advocates encourage mental health consumers to take an active role in choosing their treatment. Various advocacy groups have worked tirelessly to change the way the public views mentally ill people and how society deals with them in all settings. These groups include the National Alliance on Mental Illness (NAMI), as well as the Mental Health Association, the Center to Address Discrimination and Stigma, and the Eliminate the Barriers Initiative. The U.S. federal government has also become involved in antistigma programs as part of efforts to improve the delivery of mental health services through the President's New Freedom Commission (Hogan, 2003). Looking forward into the next decade, the U.S. government has set the 2020 Healthy People initiative goals as focused on improving significantly the quality of treatment services (see Table 1.2).

Scientific Approach

Early Greek philosophers were the first to attempt a scientific approach to understanding psychological disorders. Hippocrates (ca. 460–377 B.C.), considered the founder of modern medicine, believed that there were four important bodily fluids that influenced physical and mental health, leading to four personality dispositions. To treat a psychological disorder would require ridding the body of the excess fluid. Several hundred years later, the Roman physician Claudius Galen (A.D. 130–200) developed a system of medical knowledge based on anatomical studies.

Scientists made very few significant advances in the understanding of abnormality until the eighteenth century. Benjamin Rush (1745–1813), the founder of American psychiatry, rekindled interest in the scientific approach to psychological disorders. In 1783, Rush joined the medical staff of Pennsylvania Hospital. Appalled by the poor hospital conditions, he advocated for improvements such as placing psychologically disturbed patients in their own wards, giving them occupational therapy, and prohibiting visits from curiosity seekers who would visit the hospital for entertainment.

Reflecting the prevailing methods of the times, Rush also supported the use of bloodletting and purging in the treatment of psychological disorders as well as the "tranquilizer" chair, intended to reduce blood flow to the brain by binding the patient's head and limbs. Rush also recommended submerging patients in cold shower baths and frightening them with death threats. He thought that fright inducement would counteract the overexcitement that he believed was responsible for the patients' violent behavior (Deutsch, 1949).

In 1844, a group of 13 mental hospital administrators formed the Association of Medical Superintendents of American Institutions for the Insane. The organization eventually changed its name to the American Psychiatric Association. German psychiatrist Wilhelm Greisinger published *The Pathology and Therapy of Mental Disorders* in 1845, which proposed that "neuropathologies" were the cause of psychological disorders. Another German psychiatrist, Emil Kraepelin, promoted a classification system much like that applied to medical diagnoses. He proposed that disorders could be identified by their patterns of symptoms. Ultimately, this work provided the scientific basis for current diagnostic systems.

Positive psychology emphasizes personal growth through meditation and other alternate routes to self-discovery.

The scientific approach to psychological disorders also gained momentum as psychiatrists and psychologists proposed behavior models that included explanations of abnormality. In the early 1800s, European physicians experimented with hypnosis for therapeutic purposes. Eventually, these efforts led to the groundbreaking work of Viennese neurologist Sigmund Freud (1856–1939), who in the early 1900s developed psychoanalysis, a theory and system of practice that relied heavily on the concepts of the unconscious mind, inhibited sexual impulses, and early development.

Throughout the twentieth century, psychologists developed models of normal behavior, which eventually became incorporated into systems of therapy. The work of Russian physiologist Ivan Pavlov (1849–1936), known for his discovery of classical conditioning, became the basis for the behaviorist movement begun in the United States by John B. Watson (1878–1958). B. F. Skinner (1904–1990) formulated a systematic approach to operant conditioning, specifying the types and nature of reinforcement as a way to modify behavior. In the twentieth century, these models continued to evolve into the social learning theory of Albert Bandura (1925–), the cognitive model of Aaron Beck (1921–), and the rational-emotive therapy approach of Albert Ellis (1913–2007).

In the 1950s, scientists experimenting with pharmacological treatments invented medications that for the first time in history could successfully control the symptoms of psychological disorders. Now, patients could receive treatments that would allow them to live for extended periods of time on their own outside psychiatric hospitals. In 1963, the Mental Retardation Facilities and Community Mental Health Center Construction Act proposed patient treatment in clinics and treatment centers outside of mental hospitals. This legislation paved the way for the deinstitutionalization movement and subsequent efforts to continue to improve community treatment.

Most recently, the field of abnormal psychology is benefiting from the **positive psychology** movement, which emphasizes the potential for growth and change throughout life. The movement views psychological disorders as difficulties that inhibit the individual's ability to achieve highly subjective well-being and feelings of fulfillment. In addition, the positive psychology movement emphasizes prevention rather than intervention. Instead of fixing

positive psychology
Perspective that emphasizes the potential for growth and change throughout life.

problems after they occur, it would benefit people more if they could avoid developing symptoms in the first place. Although its goals are similar to those of the humanitarian approach, the positive psychology movement has a strong base in empirical research and as a result is gaining wide support in the field.

1.6 Research Methods in Abnormal Psychology

As you've just learned, the scientific approach led to significant advances in the understanding and treatment of abnormal behavior. The essence of the scientific method is objectivity, the process of testing ideas about the nature of psychological phenomena without bias before accepting these ideas as adequate explanations.

The scientific method involves a progression of steps from posing questions of interest to sharing the results with the scientific community. Throughout the scientific method, researchers maintain the objectivity that is the hallmark of the scientific approach. This means that they do not let their personal biases interfere with the data collection or interpretation of findings. In addition, researchers must always be open to alternative explanations that could account for their findings.

Although the scientific method is based on objectivity, this does not mean that scientists have no personal interest in what they are studying. In fact, it is often quite the opposite. Many researchers become involved in the pursuit of knowledge in areas that relate to experiences in their own lives, particularly in the field of abnormal psychology. They may have relatives afflicted with certain disorders or they may have become puzzled by a client's symptoms. In conducting their research, however, they cannot let these personal biases get in the way.

Thus, in posing questions of interest, psychological researchers may wonder whether a particular kind of experience led to an individual's symptoms, or they may speculate about the role of particular biological factors. Clinical psychologists are also interested in finding out whether a certain treatment will effectively treat the symptoms of a disorder. In either case, the ideal approach to answering these questions involves a progression through a set of steps in which the psychologist proposes a hypothesis, conducts a study, and collects and analyzes the data. Eventually, they communicate results through publication in scientific journals.

1.7 Experimental Design

When using experimental design in research, an investigator sets up a test of a hypothesis by constructing a manipulation of a key variable of interest. The variable that the investigator manipulates is called the **independent variable,** meaning that the investigator controls it. The investigator sets up at least two conditions that reflect different levels of the independent variable. In most cases, these conditions are the "experimental" or treatment group (the group that receives the treatment) and the "control" group (the group that receives no treatment or a different treatment). The researchers then compare the groups on the **dependent variable,** which is the variable that they observe. Key to the objectivity of experimental research is the requirement that the researchers always randomly assign participants to the different groups. A study would be flawed if all the men were in the experimental group, for example, and all the women were in the control group.

independent variable
The variable whose level is adjusted or controlled by the experimenter.

dependent variable
The variable whose value is the outcome of the experimenter's manipulation of the independent variable.

In research on the causes of abnormal behavior, it may be difficult to set up a true experimental study. Many of the variables that are of most interest to psychologists are ones that the investigator cannot control; hence, they are not truly "independent." For example, depression can never be an independent variable because the investigator cannot manipulate it. Similarly, investigators cannot randomly assign people to groups based on their biological sex. Studies that investigate differences among groups not determined by random assignment are known as "quasi-experimental."

The majority of true experimental studies in abnormal psychology, at least those on humans, test not the causes of abnormal behavior, but the effectiveness of particular treatments where it is possible to design randomly assigned control and experimental groups. Investigators evaluate a treatment's effectiveness by comparing the groups on dependent variables such as symptom alleviation. There may be more than one experimental group, depending on the nature of the particular study.

It is common practice in studies evaluating therapy effectiveness to have a **placebo condition** in which participants receive a treatment similar to the experimental treatment, but lacking the key feature of the treatment of interest. If the study is evaluating effectiveness of medication, the placebo has inert ingredients. In studies evaluating effectiveness of therapy, scientists must design the placebo in a way that mimics, but is not the same as the actual therapy. Ideally, the researchers would want the placebo participants to receive treatments of the same frequency and duration as the experimental group participants who are receiving psychotherapy.

placebo condition
Condition in an experiment in which participants receive a treatment similar to the experimental treatment, but lacking the key feature of the treatment of interest.

Expectations about the experiment's outcome can affect both the investigator and the participant. These so-called "demand characteristics" can compromise the conclusions about the intervention's true effectiveness. Obviously, the investigator should be as unbiased as possible, but there still may be subtle ways that he or she communicates cues that affect the participant's response. The participant may also have a personal agenda in trying to prove or disprove the study's supposed true intent. The best way to eliminate demand characteristics is to use a **double-blind** method, which shields both investigator and participant from knowing either the study's purpose or the nature of the patient's treatment.

double-blind
An experimental procedure in which neither the person giving the treatment nor the person receiving the treatment knows whether the participant is in the experimental or control group.

In studies involving medication, a completely inert placebo may not be sufficient to establish true experimental control. In an "active placebo" condition, researchers build the experimental medication's side effects into the placebo. If they know that a medication produces dry mouth, difficulty swallowing, or upset stomach, then the placebo must also mimic these side effects or participants will know they are receiving placebos.

Toward the DSM-5

Definition of a Mental Disorder

There are five criteria for a mental disorder in the *DSM-5*, the same number as was included in *DSM-IV*. There will be slight wording changes, but the criteria still refer to "clinically significant" to establish the fact that the behaviors under consideration are not passing symptoms or minor difficulties. *DSM-5* refers to the behaviors as having a "psychobiological function," a term that *DSM-IV* does not use. Both the *DSM-IV* and *DSM-5* state that disorders must occur outside the norm of what is socially accepted and expected for people experiencing particular life stresses. *DSM-5* also specifies that the disorder must have "diagnostic validity," meaning that, for example, the diagnoses predict future behavior or responses to treatment. The diagnosis of abnormality also must be clinically useful, meaning that it provides either a better understanding of the disorder or leads to better assessment and treatment than would otherwise be the case. Finally, the authors of *DSM-5* provide a caution against changing the lists of disorders (either adding to or subtracting) without taking into account potential benefits and risks. For example, adding a new diagnosis might lead to labeling as "abnormal" a behavior previously considered "normal." The advantage of having the new diagnosis must outweigh the harm of categorizing a "normal" person as having a "disorder." Similarly, deleting a diagnosis for a disorder that requires treatment (and hence insurance coverage) might leave individuals who still require that treatment vulnerable to withholding of care or excess payments for treatment.

1.8 Correlational Design

Studies based on a correlational design involve tests of relationships between variables that researchers cannot experimentally manipulate. We express the correlation statistic in terms of a number between +1 and −1. Positive numbers represent positive correlations, meaning that, as scores on one variable increase, scores on the second variable increase. For example, because one aspect of depression is that it causes a disturbance in normal sleep patterns, you would expect then that scores on a measure of depression would be positively correlated with scores on a measure of sleep disturbances. Conversely, negative correlations indicate that, as scores on one variable increase, scores on the second variable decrease. An example of a negative correlation is the relationship between depression and self-esteem. The more depressed people are, the lower their scores are on a measure of self-esteem. In many cases, there is no correlation between

You Be the Judge

Being Sane in Insane Places

In the early 1970s, psychologist David Rosenhan embarked upon a groundbreaking study that was to shatter people's assumptions about the difference between "sane" and "insane." Motivated by what he regarded as a psychiatric diagnostic system that led to the hospitalization of people inappropriately diagnosed as having schizophrenia, Rosenhan and his co-workers decided to conduct their own experiment to put the system to the test. See whether you think their experiment proved the point.

Eight people with no psychiatric history of symptoms of any kind, employed in a variety of professional occupations, checked themselves into psychiatric hospitals complaining about hearing voices that said, "Empty," "Hollow," and "Thud." These were symptoms that psychiatric literature never reported. In every other way, the "pseudopatients" provided factual information about themselves (except their names and places of employment). Each pseudopatient was admitted to his or her respective hospital; once admitted, they showed no further signs of experiencing these symptoms. However, the hospital staff never questioned their need to be hospitalized; quite the contrary, their behavior on the hospital wards, now completely "normal," was taken as further evidence of their need for continued hospitalization. Despite the efforts of the pseudopatients to convince the staff that there was nothing wrong with them, it took from 7 to 52 days for their discharge. Upon their release, they received the diagnosis of "schizophrenia in remission" (meaning that they, for the moment, no longer would have a diagnosis of schizophrenia).

There was profound reaction in the psychiatric community to the Rosenhan study. If it was so easy to institutionalize nonpatients, wasn't there something wrong with the diagnostic system? How about the tendency to label people as "schizophrenic" when there was nothing wrong with them, and to hang on to the label even when they no longer showed any symptoms? Additionally, the pseudopatients reported that they felt dehumanized by the staff and failed to receive any active treatment. Once on the outside, they could report to the world at large about the failings of psychiatric hospitals to provide appropriate treatment. True patients would not have received so much sympathetic press, and therefore, would not have paved the way for the deinstitutionalization movement that was to follow the study's widespread dissemination.

Now, you be the judge. Do you think that it was unethical for Rosenhan to devise such a study? The mental health professionals at the hospitals had no idea that they were the "subjects" of the study. They had responded to what seemed to them to be serious psychological symptoms by individuals voluntarily seeking admission. At the point of discharge, the fact that the doctors labeled the pseudopatients as being in remission implied that they were symptom-free, but there was no reason for the staff to doubt the truth of the symptoms. On the other hand, had the staff known they were in a study, they might have reacted very differently, and as a result, the study would not have had an impact.

How about the quality of this study from a scientific point of view? There was no control condition so it was not truly an experiment. Moreover, the study did not take objective measures of the staffs' behavior, nor were there direct outcome measures that the researchers could statistically analyze.

Q: *You be the judge:* Was Rosenhan's study, with its flaws, worthwhile? Did the ends justify the means?

two variables. In other words, two variables show no systematic relationship with each other. For example, depression is unrelated to height.

Just knowing that there is a correlation between two variables does not tell you whether one variable causes the other. The correlation simply tells you that the two variables are associated with each other in a particular way. Sleep disturbance might cause a higher score on a measure of depression, just as a high degree of depression might cause more

disturbed sleep patterns. Or, a third variable that you have not measured could account for the correlation between the two variables that you have studied. Both depression and sleep disturbance could be due to an underlying physiological dysfunction.

Investigators who use correlational methods in their research must always be on guard for the potential existence of unmeasured variables influencing the observed results. However, beyond simply linking two variables to see if they are correlated, researchers can use advanced methods that take more complex relationships into account. For example, we can assess the relative contributions of sleep disturbances, self-esteem, gender, and social class with correlational methods that evaluate several related variables at the same time.

1.9 Types of Research Studies

How do investigators gather their data? There are several types of studies that psychologists use. The type of study depends in large part upon the question and the resources available to the investigator. Table 1.3 summarizes these methods.

Survey

Investigators use a **survey** to gather information from a sample of people representative of a particular population. They use surveys primarily in studies involving a correlational design when investigators seek to find out whether potentially related variables actually do relate to each other as hypothesized. In a survey, investigators design sets of questions to tap into these variables. They may conduct a survey to determine whether age is correlated with subjective well-being, controlling for the influence of health. In this case, the researcher may hypothesize that subjective well-being is higher in older adults, but only after taking into account the role of health.

survey
A research tool used to gather information from a sample of people considered representative of a particular population, in which participants are asked to answer questions about the topic of concern.

Researchers also use surveys to gather statistics about the frequency of psychological symptoms. For example, the Substance Abuse and Mental Health Services Administration of the United States government (SAMHSA) conducts yearly surveys to establish the frequency of use of illegal substances within the population. The World Health Organization (WHO) conducts surveys comparing the frequency by country of psychological disorders. These surveys provide valuable epidemiological data that can assess the health of the population.

Table 1.3 **Research Methods in Abnormal Psychology**

Type of Method	Purpose	Example
Survey	Obtain population data	Researchers working for a government agency attempt to determine disease prevalence through questionnaires administered over the telephone.
Laboratory study	Collect data under controlled conditions	An experiment is conducted to compare reaction times to neutral and fear-provoking stimuli.
Case study	An individual or a small group of individuals is studied intensively	A therapist describes the cases of members of a family who share the same unusual disorder.
Single case experimental design	The same person serves as subject in experimental and control conditions	Researchers report on the frequency of a client's behavior while the client is given attention (experimental treatment) and ignored (control condition) for aggressive outbursts in a psychiatric ward.
Behavioral genetics	Attempt to identify genetic patterns in inheritance of particular behaviors	Genetic researchers compare the DNA of people with and without symptoms of particular psychological disorders

REAL STORIES

Vincent van Gogh: Psychosis

> "There is safety in the midst of danger. What would life be if we had no courage to attempt anything? It will be a hard pull for me; the tide rises high, almost to the lips and perhaps higher still, how can I know? But I shall fight my battle . . . and try to win and get the best of it." Vincent van Gogh, December, 1881.

Vincent van Gogh, a Dutch-born post-impressionist painter, lived most of his life in poverty and poor physical and mental health. After his death, his work grew immensely in recognition and popularity. His now instantly recognizable paintings sell for tens of millions of dollars, while during his lifetime his brother, Theo, mainly supported the painter, sending him art supplies and money for living expenses. Van Gogh struggled with mental illness for much of his life, spending one year in an asylum before the last year of his life, when he committed suicide in 1890 at the age of 37.

Though the specific nature of van Gogh's mental illness is unknown, his 600 or so letters to Theo offer some insight into his experiences. Published in 1937, *Dear Theo: The Autobiography of Vincent van Gogh* provides an unfiltered glimpse into all aspects of his life including art, love, and his psychological difficulties. Van Gogh never received a formal diagnosis in his lifetime, and to this day many psychologists argue over the disorder from which he may have been suffering. Psychologists have suggested as many as 30 possible diagnoses ranging from schizophrenia and bipolar disorder to syphilis and alcoholism. Van Gogh's constant poor nutrition, excessive consumption of absinthe, and a tendency to work to the point of exhaustion undoubtedly contributed to and worsened any psychological issues he experienced.

Van Gogh's romantic life was highlighted by a series of failed relationships, and he never had children. When he proposed marriage to Kee Vos-Stricker in 1881, she and her parents turned him down because he was having difficulty supporting himself financially at the time. Kee was a widow with a child and van Gogh would not have been able to support the family fully. In response to this rejection, van Gogh held his hand over a lamp flame, demanding her father that he be allowed see the woman he loved, an event he was later unable to recall entirely. Unfortunately for van Gogh, the affection was never reciprocated. His longest known romantic relationship lasted for one year, during which he lived with a prostitute and her two children.

Van Gogh first learned to draw in middle school, a hobby that he carried on throughout his failed attempt at becoming a religious missionary. He failed his entrance exam for theology school in Amsterdam, and later failed missionary school. In 1880 he decided to devote his life to painting. After attending art school in Brussels, van Gogh moved around the Netherlands and fine-tuned his craft, often living in poverty and squalid conditions. He spent some time living with his parents, but never stayed with them long due to his tumultuous relationship with his father. By 1885, he began to gain recognition as an artist and had completed his first major work, *The Potato Eaters*. The following year, he moved to Paris where he lived with his brother and began to immerse himself in the thriving art world of the city. Due to his poor living conditions, van Gogh's health began to deteriorate, and so he moved to the countryside in the south of France. There he spent two months living with and working alongside his good friend and fellow painter Paul Gauguin. Their artistic differences led to frequent disagreements that slowly eroded their amiable companionship. In *Dear Theo*, Johanna van Gogh, Vincent's sister-in-law, writes about

Vincent Van Gogh's *Starry Night over the Rhone,* painted in 1888, one year before his death.

the notorious incident that took place on December 23, 1888. Van Gogh, "in a state of terrible excitement and high fever, had cut off a piece of his own ear, and had brought it as a gift to a woman in a brothel. There had been a violent scene; Roulin, the postman, managed to get him home, but the police intervened, found Vincent bleeding and unconscious in bed, and sent him to the hospital."

After the incident, van Gogh was committed to an asylum in Saint-Remy de Provence, France, for about one year. While in the hospital, he often reflected on the state of his mental health in letters to his brother:

"These last three months do seem so strange to me. There have been moods of indescribable mental anguish, sometimes moments when the veil of time and of inevitable circumstance seemed for the twinkling of an eye to be parted. After all, you are certainly right, damn well right; even making allowance for hope, the thing is to accept the probably disastrous reality. I am hoping to throw myself once again wholly into my work, which has got behindhand."

While hospitalized and working on recovering from his "attacks," van Gogh spent most of his time working feverishly on painting, often finding inspiration in the scenery surrounding the asylum. For van Gogh, painting was a welcome relief that he hoped would cure his illness. Of his experiences with mental illness, he wrote ". . . I am beginning to consider madness as a disease like any other, and accept the thing as such; whereas during the crises themselves I thought that everything I imagined was real." It is clear from many of his letters that he had been experiencing hallucinations and perhaps delusions—two hallmark symptoms of psychological disorders involving psychosis, such as schizophrenia.

After his release from the asylum, van Gogh participated in art shows in Brussels and Paris. Though he remained artistically productive, his depression deepened until on July 29, 1890, he walked into a field and shot himself in the chest with a revolver, dying two days later. Van Gogh's last words, according to his brother who had rushed to be at his side at his deathbed, were "the sadness will last forever."

In his lifetime, Vincent van Gogh sold only one painting; in 1990 his *Portrait of Dr. Gachet* sold for $82.5 million, making it one of the most expensive paintings ever sold. His priceless work graces galleries around the globe and has an invaluable influence in the art world. Had his story taken place now, with many different options for psychological treatment of psychotic symptoms and depression, his life might not have been cut short so tragically.

Researchers report epidemiological data about the occurrence of psychological symptoms and disorders in terms of the time frame over which it occurs. The **incidence** of a disorder is the frequency of *new* cases of a disorder within a given time period. Respondents providing incidence data state whether they now have a disorder that they have never had before but now are experiencing. Incidence information can cover any time interval; people tend to report it in terms of one month, six months, and one year. Investigators use incidence data when they are interested in determining how quickly a disorder is spreading. For example, during an epidemic, health researchers need to know how to plan for controlling the disease, and so incidence data is most pertinent to this question.

incidence
The frequency of new cases within a given time period.

The **prevalence** of a disorder refers to the number of people who have *ever* had the disorder over a specified period of time. To collect prevalence data, investigators ask respondents to state whether, during this period of time, they experienced the symptoms of the disorder. The time period of reference can be the day of the survey, in which case we call it point prevalence. There is also one-month prevalence, which refers to the 30 days preceding the study, and lifetime prevalence, which refers to the entire life of the respondent. For example, researchers may ask respondents whether they smoked cigarettes at any time during the past month (one-month prevalence) or whether they ever, in their lifetimes, used cigarettes (lifetime prevalence). Typically, lifetime prevalence is higher than one-month or point prevalence because the question captures all past experience of a disorder or a symptom.

prevalence
The number of people who have ever had a disorder at a given time or over a specified period.

Laboratory Studies

Researchers carry out most experiments in psychological laboratories in which participants provide data under controlled conditions. Participants are exposed to conditions based upon the nature of the experimental manipulation. For example, investigators may show participants stimuli on computer screens and ask them to respond. The collected data might include speed of reaction time or memory for different types of stimuli.

Laboratory studies may also involve comparison of brain scan responses taken under differing conditions. Another type of laboratory study may involve observing people in small group settings in which the investigators study their interactions.

Although laboratories are ideal for conducting such experiments, they may also be appropriate settings for self-report data such as responses to questionnaires. Researchers can ask participants to complete their responses in a fixed period of time and under conditions involving a minimum of distractions. They may also provide them with self-report instruments to complete on a computer, allowing for the investigator to collect data in a systematic and uniform fashion across respondents.

The Case Study Method

case study
An intensive study of a single person described in detail.

Many of the researchers, from what the profession regards as classic studies in early abnormal psychology, based their findings on the **case study,** which is an intensive investigation of an individual or small group of individuals. For example, Freud based much of his theory on reports of his own patients—the development of their symptoms and their progress in therapy. In current research, investigators carry out case studies for a number of reasons. They afford the opportunity to report on rare cases, or the development of a disorder over time may be the focus of the study. For example, a clinical psychologist may write a report in a published journal about how she provided treatment to a client with a rare type of fear.

qualitative research
A method of analyzing data that provides research with methods of analyzing complex relationships that do not easily lend themselves to conventional statistical methods.

The advantage of an in-depth case study is also a potential disadvantage in that it does not involve enough experimental control to make a useful addition to the literature. Investigators using case studies, therefore, must be extremely precise in their methods and, as much as possible, take an objective and unbiased approach. There are standards for use in **qualitative research** that can ensure that researchers present case study data in a way that will be valuable to other investigators.

Single Case Experimental Design

single case experimental design
Design in which the same person serves as the subject in both the experimental and control conditions.

In a **single case experimental design (SCED)**, the same person serves as the subject in both the experimental and control conditions. Particularly useful for studies of treatment effectiveness, a single-subject design typically involves alternating off-on phases of the baseline condition ("A") and the intervention ("B"). The profession also refers to SCEDs as "ABAB" designs, reflecting the alternation between conditions A and B. Figure 1.1 shows an example of an SCED involving self-injurious behavior.

In cases where withholding the treatment in the "B" phase would present an ethical problem (because of an elimination of an effective treatment), researchers use a variation called the multiple baseline method. In a multiple baseline design, the researcher applies the treatment in an AB fashion so that it is never removed. The observation occurs across different subjects, for different behaviors, or in different settings. The researcher takes repeated measures of behavior in relation to introduction of the treatment. For example, in treating a suicidal client, an investigator may first target suicidal thoughts, and second, target suicidal behaviors. The power of the design is in showing that the behaviors change only when the researcher introduces specific treatments (Rizvi & Nock, 2008).

Investigations in Behavioral Genetics

concordance rate
Agreement ratios between people diagnosed as having a particular disorder and their relatives.

Researchers in the field of behavioral genetics and psychopathology attempt to determine the extent to which people inherit psychological disorders. Behavioral geneticists typically begin an investigation into a disorder's genetic inheritance after observing that the disorder shows a distinct pattern of family inheritance. This process requires obtaining complete family histories from people whom they can identify as having symptoms of the disorder. The investigators then calculate the **concordance rate,** or agreement ratios, between people diagnosed as having the disorder and their relatives. For example, a

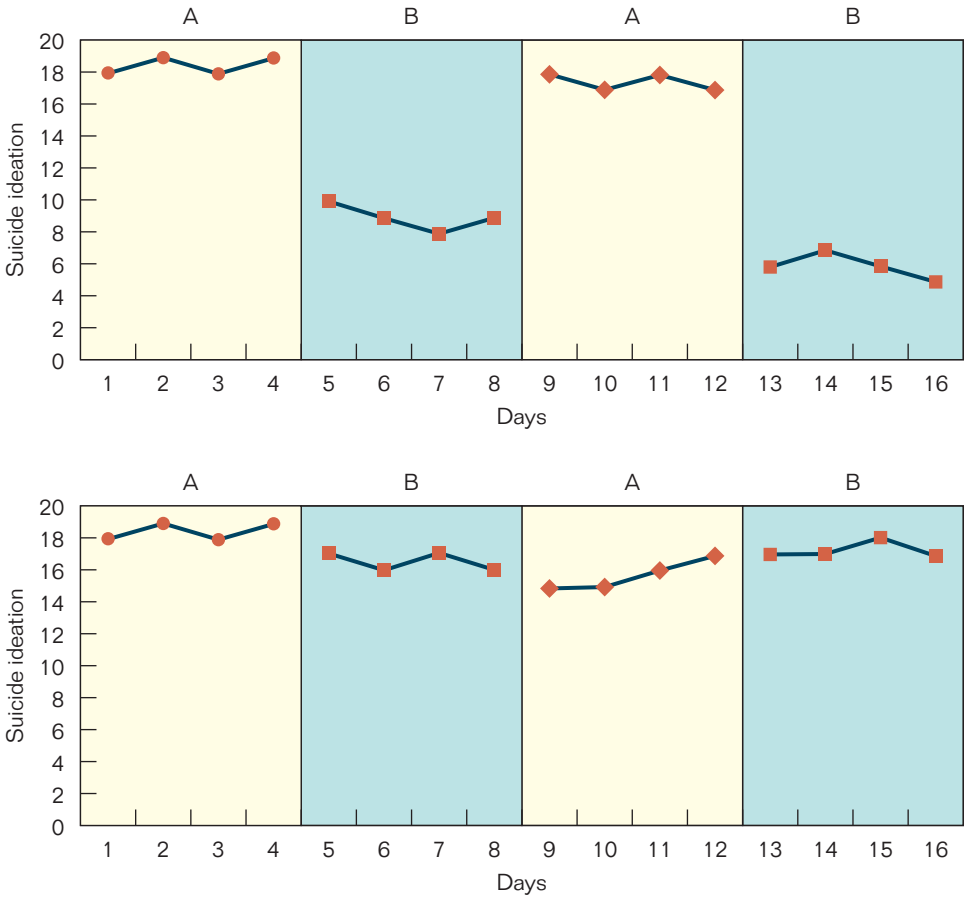


FIGURE 1.1 SCED

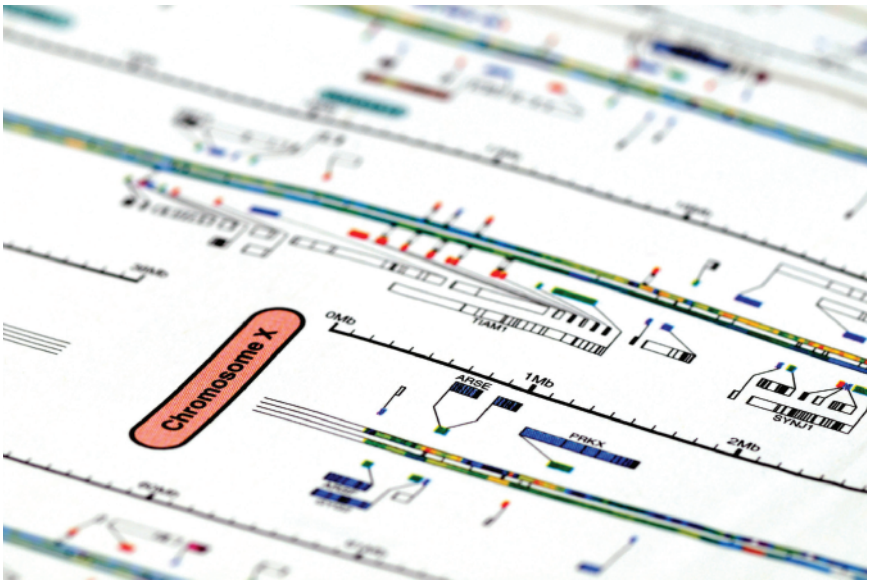
In an ABAB design, researchers observe behaviors in the "A" phase, institute treatment in the "B" phase, and then repeat the process. In this hypothetical study, suicide ideation seems to improve with treatment in the top set of graphs but shows no effect of treatment in the bottom set of graphs (Rizvi & Nock, 2008).

researcher may observe that 6 out of a sample of 10 twin pairs have the same diagnosed psychological disorder. This would mean that, among this sample, there is a concordance rate of .60 (6 out of 10). We would expect an inherited disorder to have the highest concordance between monozygotic or identical twins (whose genes are the same), with somewhat lower rates between siblings and dizygotic or fraternal twins (who are no more alike genetically than siblings of different ages), and even lower rates among more distant relatives.

A second approach in behavioral genetics is to study families who have adopted. The most extensive evidence available from these studies comes from the Scandinavian countries, where the governments maintain complete birth and adoption records. The research studies two types of adoptions. The first is an adoption study in which researchers establish the rates of the disorder in children whose biological parents have diagnosed psychological disorders, but whose adoptive parents do not. If the children have the disorder, this suggests that genetic factors play a stronger role than the environment. In the second adoption study, referred to as "cross-fostering," researchers examine the frequency of the disorder in children whose biological parents had no disorder, but whose adoptive parents do.

Twin studies are a third method of behavioral genetics. In these studies, researchers compare monozygotic twins reared together to those reared apart. Theoretically, if twins reared apart share a particular disorder, this suggests that the environment played a relatively minor role in causing that behavior.

These kinds of studies enable researchers to draw inferences about the relative contributions of biology and family environment to the development of psychological disorders. However, they are imprecise and have several potential serious flaws. Adoption studies can be suggestive, but are hardly definitive. There may be unmeasured characteristics of the adoptive parents that influence the development of the disorder in the children. The most significant threat to the usefulness of twin studies is the fact that the majority of monozygotic twins do not share the same amniotic sac during prenatal development (Mukherjee et al., 2009). They may not even share 100 percent of the same DNA (Ollikainen et al., 2010).



Gene mapping is revolutionizing the way that scientists understand and treat psychological disorders.

gene mapping
The attempt by biological researchers to identify the structure of a gene and the characteristics it controls.

molecular genetics
The study of how genes translate hereditary information.

In **gene mapping** researchers examine and connect variations in chromosomes to performance on psychological tests or diagnosis of specific disorders. **Molecular genetics** studies how genes translate hereditary information. We use these methods in the study of abnormal psychology to determine how hereditary information translates into behavior disorders. They have led to widespread advances in the understanding of such disorders as autism, schizophrenia, and various anxiety disorders (Hoffman & State, 2010).

Bringing It All Together: Clinical Perspectives

As you come to the close of this chapter, you now have an appreciation of the issues that are central to your understanding of abnormal psychology. We have tried to give you a sense of how complex it is to define abnormality, and you will find yourself returning to this issue as you read about many of the disorders in the chapters that follow. We will elaborate on the historical perspective in subsequent chapters as we look at theories of and treatments for specific disorders. Currently, developments are emerging in the field of abnormal psychology at an unbelievable pace due to the efforts of researchers applying the techniques described here. You will learn more about some of these research methods in the context of discussions regarding specific disorders. You will also develop an understanding of how clinicians, such as Dr. Sarah Tobin, look at the range of psychological disorders that affect people throughout the life span. We will give particular attention to explaining how disorders develop and how we can best treat them. Our discussion of the impact of psychological disorders forms a central theme for this book, as we return time and again to consideration of the human experience of psychological disorders.

Return to the Case: Rebecca Hasbrouck

An intern saw Rebecca at the counseling center once a week for 12 consecutive weeks. During the first few sessions she was often tearful, especially when talking about her boyfriend and how lonely she was feeling. In therapy, we worked on identifying her emotions and finding coping skills for dealing with stress. Eventually, Rebecca's feelings of sadness lifted as she became accustomed to her life on campus and was able to make a few close friends. Since she was feeling better, her sleeping also improved, which helped her to concentrate in class more easily, allowing her to perform better, and thus, feel more confident in herself as a student.

Dr. Tobin's reflections: It was clear to me in our initial session that Rebecca was a young woman who was having a particularly difficult time dealing with ordinary adjustment issues in adapting to college. She was overwhelmed by the many new experiences confronting her as well, and she seemed particularly unable to cope with being on her own and being separated from her support network including her family and boyfriend. Her high academic standards added to her stress and because she didn't have social support, she was unable to talk about the difficulties she was having, which surely perpetuated her problems. I am glad that she sought help early on before her difficulties became exacerbated and that she responded so well to treatment.

SUMMARY

- Questions about normality and abnormality are basic to our understanding of psychological disorders. They can affect us in very personal ways.
- Social impact can affect psychological disorders. Social attitudes toward people with psychological disorders range from discomfort to prejudice. Language, humor, and stereotypes all portray psychological disorders in a negative light. Stereotypes then result in social discrimination, which only serves to complicate the lives of the affected even more.
- The mental health community currently uses diagnostic procedures to define four criteria for abnormality: 1) **distress,** 2) **impairment,** 3) **risk,** and 4) **behavior outside the norms of the social and cultural context within which it takes place.** While these four criteria can serve as the basis for defining abnormality, often there is an interaction.
- Causes of abnormality incorporate **biological**, **psychological,** and **sociocultural** factors.
- Three prominent themes in explaining psychological disorders that recur throughout history include 1) spiritual, 2) scientific, and 3) humanitarian. **Spiritual** explanations regard abnormal behavior as the product of possession by evil or demonic spirits. **Humanitarian** explanations view psychological disorders as the result of cruelty, stress, or poor living conditions. **Scientific** explanations look for causes that we can objectively measure, such as biological alterations, faulty learning processes, or emotional stressors.
- Researchers use various methods to study the causes and treatment of psychological disorders. These include 1) the **scientific method,** which involves a progression of steps from posing questions of interest to sharing the results with the scientific community, 2) **experimental design,** which testes a hypothesis by constructing a manipulation of a key variable interest, and 3) **correlational design,** which involves tests of relationships between variables that researchers cannot experimentally manipulate.
- Types of research studies include **surveys, laboratories,** and **case studies.** Surveys enable researchers to estimate the incidence and prevalence of psychological disorders. In a laboratory, participants are exposed to conditions based on the nature of the experimental manipulation. Case study enables the researcher to intensively study one individual. This can also involve single-subject design, where the researcher studies one person at a time in both the experimental and control conditions, as he or she applies and removes treatment in alternating phases.
- Investigations in the field of behavioral genetics and psychotherapy attempt to determine the extent to which people inherit psychological disorders. Different studies enable researchers to draw inferences about the relative contributions of biology and family environment to the development of psychological disorders, but they are imprecise and have potential serious flaws.

KEY TERMS

Biopsychosocial 8
Case study 20
Concordance rate 20
Dependent variable 14
Double-blind 15
Gene mapping 22
Humanitarian 9
Incidence 19
Independent variable 14
Molecular genetics 22
Placebo condition 15
Positive psychology 13
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