CHAPTER 3

Classification and Assessment of Abnormal Behavior

CHAPTER OUTLINE

"Jerry Has a Panic Attack on the Interstate"

Interviewer: Can you tell me a bit about what it was that brought you to the clinic?
Jerry: Well, . . . after the first of the year, I started getting these panic attacks. I didn't know what the panic attack was.
Interviewer: Well, what was it that you experienced?
Jerry: Uhm, the heart beating, racing . . .
Interviewer: Your heart started to race on you.
Jerry: And then uh, I couldn't be in one place, maybe a movie, or a church . . . things would be closing in on me and I'd have to get up and leave.
Interviewer: The first time that it happened to you, can you remember that?
Jerry: Uhm, yeah I was . . .
Interviewer: Take me through that, what you experienced.
Jerry: I was driving on an interstate and, oh I might've been on maybe 10 or 15 minutes.
Interviewer: Uh huh.
Jerry: All of a sudden I got this fear. I started to . . . uh race.
Interviewer: So you noticed you were frightened?
Jerry: Yes.
Interviewer: Your heart was racing and you were perspiring. What else?
Jerry: Perspiring and uh, I was afraid of driving anymore on that interstate for the fear that I would either pull into a car head on, so uhm, I just, I just couldn't function. I just couldn't drive.
Interviewer: What did you do?
Jerry: I pulled, uh well at the nearest exit. I just got off . . . uh stopped and, I had never experienced anything like that before.
Interviewer: That was just a . . .
Jerry: Out of the clear blue . . .
Interviewer: Out of the clear blue? And what'd you think was going on?
Jerry: I had no idea.
Interviewer: You just knew you were . . .
Jerry: I thought maybe I was having a heart attack.
Interviewer: Okay.

Source: Exerpted from "Panic Disorder: The Case of Jerry," found on the *Videos in Abnormal Psychology* CD-ROM that accompanies this textbook.

JERRY BEGINS TO TELL HIS STORY, GUIDED BY THE INTERVIEWER. PSYCHOLOGISTS AND OTHER mental health professionals use clinical interviews and a variety of other means to assess abnormal behavior, including psychological testing, behavioral assessment, and physiological monitoring. The clinical interview is an important way of assessing abnormal behavior and arriving at a diagnostic impression—in this case, panic disorder. The clinician matches the presenting problems and associated features with a set of diagnostic criteria in forming a diagnostic impression.

The diagnosis of psychological or mental disorders represents a way of classifying patterns of abnormal behavior on the basis of their common features or symptoms. Abnormal behavior has been classified since ancient times. Hippocrates classified abnormal behaviors according to his theory of *humors* (vital bodily fluids). Although his theory proved to be flawed, Hippocrates' classification of some types of mental health problems generally correspond to diagnostic categories we use today. His description of melancholia, for example, is similar to our current conception of depression.

TRUTH or FICTION

T❑ F❑ Some men in India have a psychological disorder characterized by anxiety over losing semen. (p. 74)

T❑ F❑ Although it is not an exact science, the measurement of the bumps on a person's head can be used to determine the person's personality traits. (p. 80)

T❑ F❑ An objective test of personality is one that does not require any subjective judgments on the part of the person taking the test. (p. 84)

T❑ F❑ One of the most widely used personality tests asks people to interpret what they see in a series of inkblots. (p. 88)

T❑ F❑ People in weight-loss programs who carefully monitor what they eat tend to lose less weight than people who are less-reliable monitors. (p. 94)

T❑ F❑ Despite advances in technology, physicians today must still perform surgery to study the workings of the brain. (p. 96)

T❑ F❑ Cocaine cravings in people addicted to cocaine have been linked to parts of the brain that are normally activated during pleasant emotions. (p. 99)

During the Middle Ages some "authorities" classified abnormal behaviors into two groups, those that resulted from demonic possession and those due to natural causes.

The 19th-century German psychiatrist Emil Kraepelin was the first modern theorist to develop a comprehensive model of classification based on the distinctive features, or symptoms, associated with abnormal behavior patterns (see Chapter 1). The most commonly used classification system today is largely an outgrowth and extension of Kraepelin's work: the *Diagnostic and Statistical Manual of Mental Disorders (DSM),* published by the American Psychiatric Association.

Why is it important to classify abnormal behavior? For one thing, classification is the core of science. Without labeling and organizing patterns of abnormal behavior, researchers could not communicate their findings to one another, and progress toward understanding these disorders would come to a halt. Moreover, important decisions are made on the basis of classification. Certain psychological disorders respond better to one therapy than another or to one drug than another. Classification also helps clinicians predict behavior: schizophrenia, for example, follows a more or less predictable course. Finally, classification helps researchers identify populations with similar patterns of abnormal behavior. By classifying groups of people as depressed, for example, researchers might be able to identify common factors that help explain the origins of depression.

This chapter reviews the classification and assessment of abnormal behavior, beginning with the *DSM*.

HOW ARE ABNORMAL BEHAVIOR PATTERNS CLASSIFIED?

The *DSM* was introduced in 1952. The latest version, published in 2000, is the *DSM-IV-TR,* the Text Revision (TR) of the Fourth Edition (*DSM-IV*) (APA, 2000). Another common system of classification, published by the World Health Organization, is used mainly for compiling statistics on the worldwide occurrence of disorders: the *International Statistical Classification of Diseases and Related Health Problems (ICD),* which is now in its tenth revision (the *ICD*-10). The *DSM-IV* is compatible with the *ICD*, so that *DSM* diagnoses could be coded in the *ICD* system as well. Thus the two systems can be used to share information about the prevalences and characteristics of particular disorders. The *DSM* has been widely adopted by mental health professionals. However, many psychologists and other professionals criticize the *DSM* on several grounds, such as relying too strongly on the medical model. Our focus on the *DSM* reflects recognition of its widespread use, not an endorsement.

In the *DSM,* abnormal behavior patterns are classified as "mental disorders." *Mental disorders* involve either emotional distress (typically depression or anxiety), significantly impaired functioning (difficulty meeting responsibilities at work, in the family, or in society at large), or behavior that places people at risk for personal suffering, pain, disability, or death (e.g., suicide attempts, repeated use of harmful drugs).

Let us also note that a behavior pattern that represents an expected or culturally appropriate response to a stressful event, such as signs of bereavement or grief following the death of a loved one, is not considered disordered within the *DSM*, even if behavior is significantly impaired. If a person's behavior remains significantly impaired over an extended period of time, however, a diagnosis of a mental disorder might become appropriate.

The *DSM* and Models of Abnormal Behavior

The *DSM* system, like the medical model, treats abnormal behaviors as signs or symptoms of underlying disorders or pathologies. However, the *DSM* does not assume that abnormal behaviors necessarily reflect biological causes or defects. It recognizes that the causes of most mental disorders remain uncertain: Some disorders may have purely biological causes, whereas others may have psychological causes. Still others, probably most, are best explained within a multifactorial model that takes into account the interaction of biological, psychological, social (socioeconomic, sociocultural, and ethnic), and physical environmental factors.

TABLE 3.1

Sample Diagnostic Criteria for Generalized Anxiety Disorder

1. Occurrence of excessive anxiety and worry on most days during a period of 6 months or longer.
2. Anxiety and worry are not limited to one or a few concerns or events.
3. Difficulty controlling feelings of worry.
4. The presence of a number of features associated with anxiety and worry, such as the following:
   a. experiencing restlessness or feelings of edginess
   b. becoming easily fatigued
   c. having difficulty concentrating or finding one's mind going blank
   d. feeling irritable
   e. having states of muscle tension
   f. having difficulty falling asleep or remaining asleep or having restless, unsatisfying sleep
5. Experiencing emotional distress or impairment in social, occupational, or other areas of functioning as the result of anxiety, worry, or related physical symptoms.
6. Worry or anxiety is not accounted for by the features of another disorder.
7. The disturbance does not result from the use of a drug of abuse or medication or a general medical condition and does not occur only in the context of another disorder.

Source: Adapted from *DSM-IV-TR* (APA, 2000).

The authors of the *DSM* recognize that their use of the term *mental disorder* is problematic because it perpetuates a long-standing but dubious distinction between mental and physical disorders (American Psychiatric Association, 1994, 2000). They point out that there is much that is "physical" in "mental" disorders and much that is "mental" in "physical" disorders. The diagnostic manual continues to use the term *mental disorder* because its developers have not been able to agree on an appropriate substitute. In this text we use the term *psychological disorder* in place of *mental disorder* because we feel it is more appropriate to place the study of abnormal behavior more squarely within a psychological context. Moreover, the term *psychological* has the advantage of encompassing behavioral patterns as well as strictly "mental" experiences, such as emotions, thoughts, beliefs, and attitudes.

We should also recognize that the *DSM* is used to classify disorders, not people. Rather than classify someone as a *schizophrenic* or a *depressive,* we refer to *an individual with schizophrenia* or *a person with major depression*. This difference in terminology is not simply a matter of semantics. To label someone a schizophrenic carries an unfortunate and stigmatizing implication that a person's identity is defined by the disorder he or she has.

Features of the *DSM* The *DSM* is descriptive, not explanatory. It describes the diagnostic features—or, in medical terms, symptoms—of abnormal behaviors; it does not attempt to explain their origins or adopt any particular theoretical framework, such as psychodynamic or learning theory. Using the *DSM* classification system, the clinician arrives at a diagnosis by matching a client's behaviors with the criteria that define particular patterns of abnormal behavior ("mental disorders"). Table 3.1 shows the diagnostic criteria for generalized anxiety disorder.

Abnormal behavior patterns are categorized according to the features they share. For example, abnormal behavior patterns chiefly characterized by anxiety, such as panic disorder or generalized anxiety disorder (see Table 3.1), are classified as anxiety disorders. Behaviors chiefly characterized by disruptions in mood are categorized as mood disorders. The *DSM* recommends that clinicians assess an individual's mental state according to five factors, or axes. Together the five axes provide a broad range of information about the individual's functioning, not just a diagnosis (see Table 3.2). The system contains the following axes.

1. *Axis I: Clinical Disorders and Other Conditions That May Be a Focus of Clinical Attention.* This axis incorporates a wide range of clinical syndromes, including anxiety disorders, mood disorders, schizophrenia and other psychotic disorders,

TABLE 3.2

The Multiaxial Classification System of the *DSM-IV-TR*

Axis	Type of Information	Brief Description
Axis I	Clinical disorders	The patterns of abnormal behavior ("mental disorders") that impair functioning and are stressful to the individual.
	Other conditions that may be a focus of clinical attention	Other problems that may be the focus of diagnosis or treatment but do not constitute mental disorders, such as academic, vocational, or social problems, and psychological factors that affect medical conditions (such as delayed recovery from surgery due to depressive symptoms).
Axis II	Personality disorders	Personality disorders involve excessively rigid, enduring, and maladaptive ways of relating to others and adjusting to external demands.
	Mental retardation	Mental retardation involves a delay or impairment in the development of intellectual and adaptive abilities.
Axis III	General medical conditions	Chronic and acute illnesses and medical conditions that are important to the understanding or treatment of the psychological disorder or that play a direct role in causing the psychological disorder.
Axis IV	Psychosocial and environmental problems	Problems in the social or physical environment that affect the diagnosis, treatment, and outcome of psychological disorders.
Axis V	Global assessment of functioning	Overall judgment of current functioning with respect to psychological, social, and occupational functioning; the clinician may also rate the highest level of functioning occurring for at least a few months during the past year.

Source: Adapted from the *DSM-IV-TR* (APA, 2000).

adjustment disorders, and disorders usually first diagnosed during infancy, childhood, or adolescence (except for mental retardation, which is coded on Axis II). Axis I also includes relationship problems, academic or occupational problems, and bereavement, conditions that may be the focus of diagnosis and treatment but that do not in themselves constitute definable psychological disorders. Also coded on Axis I are psychological factors that affect medical conditions, such as anxiety that exacerbates an asthmatic condition or depressive symptoms that delay recovery from surgery.

2. *Axis II: Personality Disorders and Mental Retardation.* Personality disorders are enduring and rigid patterns of maladaptive behavior that typically impair relationships with others and social functioning. These include antisocial, paranoid, narcissistic, and borderline personality disorders (see Chapter 13). Mental retardation, which is also coded on Axis II, involves pervasive intellectual impairment (see Chapter 14).

   People may be given either Axis I or Axis II diagnoses or a combination of the two when both apply. For example, a person may receive a diagnosis of an anxiety disorder (Axis I) *and* a second diagnosis of a personality disorder (Axis II).
3. *Axis III: General Medical Conditions.* All medical conditions and diseases that may be important to the understanding or treatment of an individual's mental disorders are coded on Axis III. For example, if *hypothyroidism* were a direct cause of an individual's mood disorder (such as major depression), it would be coded under Axis III. Medical conditions that affect the understanding or treatment of a mental disorder (but that are not direct causes of the disorder) are also listed on Axis III. For instance, the presence of a heart condition may determine whether a particular course of drug therapy should be used with a depressed person.
4. *Axis IV: Psychosocial and Environmental Problems.* The psychosocial and environmental problems that affect the diagnosis, treatment, or outcome of a mental disorder are placed on Axis IV. These include job loss, marital separation or divorce, homelessness or inadequate housing, lack of social support, the death or loss of a friend, or

TABLE 3.3

Psychosocial and Environmental Problems

Problem Categories	Examples
Problems with primary support group	Death of family members; health problems of family members; marital disruption in the form of separation, divorce, or estrangement; sexual or physical abuse within the family; child neglect; birth of a sibling
Problems related to the social environment	Death or loss of a friend; social isolation or living alone; difficulties adjusting to a new culture (acculturation); discrimination; adjustment to transitions occurring during the life cycle, such as retirement
Educational problems	Illiteracy; academic difficulties; problems with teachers or classmates; inadequate or impoverished school environment
Occupational problems	Work-related problems including stressful workloads and problems with bosses or coworkers; changes in employment; job dissatisfaction; threat of loss of job; unemployment
Housing problems	Inadequate housing or homelessness; living in an unsafe neighborhood; problems with neighbors or landlord
Economic problems	Financial hardships or extreme poverty; inadequate welfare support
Problems with access to health care services	Inadequate health care services or availability of health insurance; difficulties with transportation to health care facilities
Problems related to interaction with the legal system/crime	Arrest or imprisonment; becoming involved in a lawsuit or trial; being a victim of crime
Other psychosocial problems	Natural or human-made disasters; war or other hostilities; problems with caregivers outside the family, such as counselors, social workers, and physicians; lack of availability of social service agencies

Source: Adapted from the *DSM-IV-TR* (APA, 2000).

exposure to war or other disasters. Some positive life events, such as a job promotion, may also be listed on Axis IV, but only when they create problems for the individual, such as difficulties adapting to a new job. Table 3.3 lists other examples from this axis.

5. *Axis V: Global Assessment of Functioning.* The clinician rates the client's current level of psychological, social, and occupational functioning using a scale similar to that shown in Table 3.4. The clinician may also indicate the highest level of functioning achieved for at least a few months during the preceding year. The level of current functioning indicates the current need for treatment or intensity of care. The level of highest functioning is suggestive of the level of functioning that might be restored.

Table 3.5 shows an example of a diagnosis in the *DSM* multiaxial system for a hypothetical case. The person receives two diagnoses, an Axis I diagnosis of generalized anxiety disorder (discussed in Chapter 6) and an Axis II diagnosis of dependent personality disorder (discussed in Chapter 13). The person also has a medical disorder (hypertension) and several psychosocial/environmental problems, as noted by the listing on Axis IV of marital separation and unemployment. The clinician also gives the person an overall rating of 62 on the level of functioning scale (GAF) on Axis V, which indicates that although the person is presenting with a mild level of symptoms or impaired functioning, he or she is functioning fairly well.

Culture-Bound Syndromes Some patterns of abnormal behavior, called **culture-bound syndromes,** occur in some cultures but are rare or unknown in others.

culture-bound syndromes Patterns of abnormal behavior found within only one or a few cultures.

Culture-bound syndromes may reflect exaggerated forms of common folk superstitions and belief patterns within a particular culture. For example, the psychiatric disorder *taijin-kyofu-sho* (TKS) is common among young men in Japan but rare elsewhere. The disorder is characterized by excessive fear of embarrassing or offending other people (Nakamura et al., 2002). People with TKS may dread blushing in front of

TABLE 3.4

Global Assessment of Functioning (GAF) Scale

Code	Severity of Symptoms	Examples
91–100	Superior functioning across a wide variety of activities of daily life	Lacks symptoms Handles life problems without them "getting out of hand"
81–90	Absent or minimal symptoms, no more than everyday problems or concerns	Mild anxiety before exams Occasional argument with family members
71–80	Transient and predictable reactions to stressful events, OR no more than slight impairment in functioning	Difficulty concentrating after argument with family Temporarily falls behind in schoolwork
61–70	Some mild symptoms, OR some difficulty in social, occupational, or school functioning, but functioning pretty well	Feels down, mild insomnia Occasional truancy or theft within household
51–60	Moderate symptoms, OR moderate difficulties in social, occupational, or school functioning	Occasional panic attacks Few friends, conflicts with coworkers
41–50	Serious symptoms, OR any serious impairment in social, occupational, or school functioning	Suicidal thoughts, frequent shoplifting Unable to hold job, has no friends
31–40	Some impairment in reality testing or communication, OR major impairment in several areas	Speech illogical Depressed man or woman unable to work, neglects family, and avoids friends
21–30	Strong influence on behavior of delusions or hallucinations, OR serious impairment in communication or judgment, OR inability to function in almost all areas	Grossly inappropriate behavior, speech sometimes incoherent Stays in bed all day, no job, home, or friends
11–20	Some danger of hurting self or others, OR occasionally fails to maintain personal hygiene, OR gross impairment in communication	Suicidal gestures, frequently violent Smears feces
1–10	Persistent danger of severely hurting self or others, OR persistent inability to maintain minimal personal hygiene, OR seriously suicidal act	Largely incoherent or mute Serious suicidal attempt, recurrent violence

Source: Adapted from the *DSM-IV-TR* (APA, 2000).

TRUTH or FICTION

Some men in India have a psychological disorder characterized by anxiety over losing semen.

TRUE. That disorder is a culture-bound syndrome found in India in which men develop intense fears over loss of semen.

others not because they are afraid of embarrassing themselves, but for fear of embarrassing others. People with TKS may also fear mumbling their thoughts aloud, lest they inadvertently offend others. The syndrome primarily affects young Japanese men and is connected with the emphasis in Japanese culture on not embarrassing others as well as deep cultural concerns over issues of shame (McNally et al., 1990).

Culture-bound syndromes in the United States include anorexia nervosa (discussed in Chapter 10) and dissociative identity disorder (formerly called *multiple personality disorder;* discussed in Chapter 7). These abnormal behavior patterns are essentially unknown in less-developed cultures. Table 3.6 lists some other culture-bound syndromes identified in the *DSM-IV-TR*.

TABLE 3.5

Example of a Diagnosis in the Multiaxial DSM System

Axis I	Generalized Anxiety Disorder
Axis II	Dependent Personality Disorder
Axis III	Hypertension
Axis IV	Problem with Primary Support Group (marital separation); Occupational Problem (unemployment)
Axis V	GAF = 62

Evaluating the *DSM* System To be useful, a diagnostic system such as the *DSM* must demonstrate **reliability** and **validity.** The *DSM* may be considered reliable, or consistent, if different evaluators using the system are likely to arrive at the same diagnoses when they evaluate the same cases. The system may be considered valid if diagnostic judgments correspond with observed behavior. For example, people diagnosed with social phobia should show abnormal levels of anxiety in social situations. Another form of validity is *predictive validity,* or ability to predict the course the disorder is likely to follow or its response to treatment. For example, people diagnosed with bipolar disorder typically respond to the drug lithium (see Chapter 8). Likewise, persons diagnosed with specific phobias (such as fear of heights) tend to be highly responsive to behavioral techniques for reducing fears (see Chapter 6).

Overall, evidence supports the reliability and validity of many *DSM* categories, including many anxiety and mood disorders, as well as alcohol and drug dependence disorders (Grant et al., 2006; Hasin et al., 2006). Yet questions about validity persist for some diagnostic classes, such as Axis II personality disorders, as well as Axis V, Global Assessment of Functioning (Moos, McCoy, & Moos, 2000; Widiger & Simonsen, 2005). Overall, it is fair to say that the validity of the *DSM* remains a subject of ongoing debate and study (Hummelen et al., 2006; Kendell & Jablensky, 2003; Watson & Clark, 2006).

Many observers have argued that the *DSM* should become more sensitive to cultural and ethnic diversity. The behaviors included as diagnostic criteria in the *DSM* are determined by consensus of mostly U.S.-trained psychiatrists, psychologists, and social workers. Had the American Psychiatric Association asked Asian-trained or Latin American–trained professionals to develop their diagnostic manual, for example, there might have been some different diagnostic criteria or even different diagnostic categories.

In fairness to the *DSM,* however, the latest edition does place greater emphasis than did earlier editions on weighing cultural factors when assessing abnormal behavior. It recognizes that clinicians unfamiliar with an individual's cultural background may incorrectly classify that individual's behavior as abnormal when it in fact falls within the normal spectrum in his or her culture. In Chapter 1 we noted that the same behavior might be deemed normal in one culture but abnormal in another. The *DSM-IV-TR* specifies that in order to make a diagnosis of a mental disorder, the behavior in question must not merely represent a culturally expectable and sanctioned response to a particular event, even though it may seem odd in the light of the examiner's own cultural standards. The *DSM-IV-TR* also recognizes that abnormal behaviors may take different forms in different cultures and that some abnormal behavior patterns are culturally specific (see Table 3.6).

All things considered, the current edition of the *DSM,* the *DSM-IV-TR,* is widely recognized as an improvement over previous editions, even though questions remain about the reliability and validity of certain diagnostic categories and about the specific criteria used to reach certain diagnoses (McGlinchey et al., 2006; Widiger & Clark, 2000; Zimmerman et al., 2006).

Advantages and Disadvantages of the *DSM* System The major advantage of the *DSM* may be its designation of specific diagnostic criteria. The *DSM* permits the clinician to readily match a client's complaints and associated features with specific standards to see which diagnosis best fits the case. For example, auditory hallucinations ("hearing voices") and delusions (fixed, but false beliefs, such as thinking that other people are devils) are characteristic symptoms of schizophrenia.

The multiaxial system paints a comprehensive picture of clients by integrating information concerning abnormal behaviors, medical conditions that affect abnormal behaviors, psychosocial and environmental problems that may be stressful to the individual, and level of functioning. The possibility of multiple diagnoses prompts clinicians to consider presenting

Assessment of level of functioning. The assessment of functioning takes into account the individual's ability to manage the responsibilities of daily living. Here we see a group home for people with mental retardation. The residents assume responsibility for household functions.

reliability In psychological assessment, the consistency of a measure or diagnostic instrument or system.

validity The degree to which a test or diagnostic system measures the traits or constructs it purports to measure.

Cultural underpinnings of abnormal behavior patterns. Culture-bound syndromes often represent exaggerated forms of cultural beliefs and values. TKS is characterized by excessive fear that one may embarrass or offend other people. The syndrome primarily affects young Japanese men and appears to be connected with the emphasis in Japanese culture on politeness and avoiding embarrassing other people.

TABLE 3.6

Examples of Culture-Bound Syndromes from Other Cultures

Culture-Bound Syndrome	Description
Amok	A disorder principally occurring in men in Southeastern Asian and Pacific Island cultures, as well as in traditional Puerto Rican and Navajo cultures in the West, it describes a type of dissociative episode (a sudden change in consciousness or self-identity) in which an otherwise normal person suddenly goes berserk and strikes out at others, sometimes killing them. During these episodes, the person may have a sense of acting automatically or robotically. Violence may be directed at people or objects and is often accompanied by perceptions of persecution. A return to the person's usual state of functioning follows the episode. In the West, we use the expression "running amuck" to refer to an episode of losing oneself and running around in a violent frenzy. The word *amuck* is derived from the Malaysian word *amoq*, meaning "engaging furiously in battle." The word passed into the English language during colonial times when British colonial rulers in Malaysia observed this behavior among the native people.
Ataque de nervios ("attack of nerves")	A way of describing states of emotional distress among Latin American and Latin Mediterranean groups, it most commonly involves features such as shouting uncontrollably, fits of crying, trembling, feelings of warmth or heat rising from the chest to the head, and aggressive verbal or physical behavior. These episodes are usually precipitated by a stressful event affecting the family (e.g., receiving news of the death of a family member) and are accompanied by feelings of being out of control. After the attack, the person returns quickly to his or her usual level of functioning, although there may be amnesia for events that occurred during the episode.
Dhat syndrome	A disorder (described further in Chapter 7) affecting males found principally in India that involves intense fear or anxiety over the loss of semen through nocturnal emissions, ejaculations, or excretion with urine (despite the folk belief, semen doesn't actually mix with urine). In Indian culture, there is a popular belief that loss of semen depletes the man of his vital natural energy.
Falling out or blacking out	Occurring principally among southern U.S. and Caribbean groups, the disorder involves an episode of sudden collapsing or fainting. The attack may occur without warning or be preceded by dizziness or feelings of "swimming" in the head. Although the eyes remain open, the individual reports an inability to see. The person can hear what others are saying and understand what is occurring but feels powerless to move.
Ghost sickness	A disorder occurring among American Indian groups, it involves a preoccupation with death and with the "spirits" of the deceased. Symptoms associated with the condition include bad dreams, feelings of weakness, loss of appetite, fear, anxiety, and a sense of foreboding. Hallucinations, loss of consciousness, and states of confusion may also be present, among other symptoms.
Koro	Found primarily in China and some other South and East Asian countries, the syndrome (also discussed further in Chapter 7) refers to an episode of acute anxiety involving the fear that one's genitals (the penis in men and the vulva and nipples in women) are shrinking and retracting into the body and that death may result.
Zar	A term used in a number of countries in North Africa and the Middle East to describe the experience of spirit possession. Possession by spirits is often used in these cultures to explain dissociative episodes (sudden changes in consciousness or identity) that may be characterized by periods of shouting, banging of the head against the wall, laughing, singing, or crying. Affected people may seem apathetic or withdrawn or refuse to eat or carry out their usual responsibilities.

Source: Adapted from the *DSM-IV-TR* (APA, 2000); Osborne, 2001; and other sources.

current problems (Axis I) along with the relatively long-standing personality problems (Axis II) that may contribute to them.

Criticisms are also leveled against the *DSM* system. Critics challenge the utility of particular symptoms or features associated with particular syndromes or of specified diagnostic criteria, such as the requirement that major depression be present for 2 weeks before a diagnosis is reached (Faraone et al., 2006; Zimmerman et al., 2006). Others challenge the reliance on the medical model. In the *DSM* system, problem behaviors are viewed as symptoms of underlying mental disorders in much the same way that physical symptoms are signs of underlying physical disorders. The very use of the term *diagnosis* presumes the medical model is an appropriate basis for classifying abnormal behaviors. But some clinicians feel that behavior, abnormal or otherwise, is too

complex and meaningful to be treated as merely symptomatic. They assert that the medical model focuses too much on what may happen within the individual and not enough on external influences on behavior, such as social factors (socioeconomic, sociocultural, and ethnic) and physical environmental factors.

Another concern is that the medical model focuses on categorizing psychological (or mental) disorders rather than describing people's behavioral strengths and weaknesses. Similarly, many investigators question whether the diagnostic model should retain its categorical structure (a disorder is either present or not). Perhaps, they argue, it should be replaced with a dimensional approach in which abnormal behavior patterns such as anxiety, depression, and personality disorders, represent extreme variations of normally occurring emotional states and psychological traits (e.g., Akiskal & Benazzi, 2005; Cuthbert, 2005; First, 2005, 2006; Kupfer, 2005; Prisciandaro & Roberts, 2005).

To behaviorally oriented psychologists, the understanding of behavior, abnormal or otherwise, is best approached by examining the interaction between the person and the environment. The *DSM* aims to determine what "disorders" people "have"—not how well they can function in particular situations. The behavioral model, alternatively, focuses more on behaviors than on underlying processes—more on what people "do" than on what they "are" or "have." Behaviorists and behavior therapists also use the *DSM,* of course, in part because mental health centers and health insurance carriers require the use of a diagnostic code and in part because they want to communicate in a common language with other practitioners. Many behavior therapists view the *DSM* diagnostic code as a convenient means of labeling patterns of abnormal behavior, a shorthand for a more extensive behavioral analysis of the problem.

Critics also complain that the *DSM* system might stigmatize people by labeling them with psychiatric diagnoses. Our society is strongly biased against people who are labeled as mentally ill. They are often shunned by others, including even family members, and subjected to discrimination—or **sanism** (Perlin, 1994), the counterpart to other forms of prejudice, such as racism, sexism, and ageism—in housing and employment.

sanism The negative stereotyping of people who are identified as mentally ill.

The *DSM* system, despite its critics, has become part and parcel of the everyday practice of most U.S. mental health professionals. It may be the one reference manual found on the bookshelves of nearly all professionals and dog-eared from repeated use. Perhaps the *DSM* is best considered a work in progress, not a final product. Work on the fifth edition of the *DSM—the DSM-V*—was well underway at the time of this writing (Krueger & Markon, 2006; McGorry, 2007). In the nearby *Controversies in Abnormal Psychology* feature, a prominent investigator in the field, Thomas Widiger, shares his views on the *DSM*, or what he refers to as the "Bible of Psychiatry." Dr. Widiger also discusses the dimensional approach to assessing personality disorders such as antisocial personality disorder. (See Chapter 13 for a description of the features of antisocial personality disorder and other personality disorders).

Now let us consider various ways of assessing abnormal behavior. We begin by considering the basic requirements for methods of assessment—that they be reliable and valid.

STANDARDS OF ASSESSMENT

Important decisions are made on the basis of classification and assessment. For example, recommendations for specific treatment techniques vary according to our assessment of the problems clients exhibit. Therefore, methods of assessment, like diagnostic categories, must be *reliable* and *valid*.

Reliability

The reliability of a method of assessment, like that of a diagnostic system, refers to its consistency. A gauge of height would be unreliable if people looked taller or shorter at every measurement. A reliable measure of abnormal behavior must also yield the same results on different occasions. Also, different people should be able to check the yardstick and

CONTROVERSIES IN ABNORMAL PSYCHOLOGY

The Bible of Psychiatry

—Thomas Widiger

If you are a clinical psychologist, there are probably many reasons to dislike the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (*DSM*). First, it is under the control of a profession with which clinical psychologists are in professional and economic competition. Second, it can be perceived as being used by, or perhaps is in fact used by, insurance companies as a means of limiting coverage of clinical practice. For example, a managed care company might limit the number of sessions they will cover depending upon the patient's diagnosis (they might not even cover the treatment of some disorders). I am not too sure that these are necessarily valid reasons for disliking the *DSM*, but I do believe they contribute to some of the criticism that it receives. But, third, and most fundamentally important, it doesn't really work that well. A diagnosis of a disorder should lead to the identification of a specific disorder that has a specific pathology that accounts for it and a specific therapy that can be used to cure the patient of that pathology. That hasn't been the case for mental disorders diagnosed by the *DSM* system, not yet at least.

Despite its shortcomings, the *DSM* is a necessary document. Clinicians and researchers need a common language with which to communicate with each other about patterns of psychopathology, and that is the primary function of the *DSM*. Prior to its first edition, the clinical practice was awash with a confusing plethora of different names for the same thing and the same name for quite different things. It was, simply put, chaotic.

Many helping professionals are critical of the DSM for placing labels on persons. We work with our clients. We don't want to categorize or label them; however, labeling is a necessity. Persons who object to labeling must also use terms (e.g., categories) that describe the problems that clients present. It is not that labeling per se is the problem. It is perhaps in part the negative connotations of receiving a psychiatric diagnosis and the stereotyping of patients diagnosed with various disorders. Each of these concerns will be briefly discussed in turn.

Regrettably, many persons feel shame or embarrassment upon receiving a psychiatric diagnosis or undergoing psychological or psychiatric treatment. In part the embarrassment or shame reflects the myth that only a small minority of the population experiences psychological problems that warrant a diagnosis of a mental disorder. It's never been clear to me why we believe that we have not, do not, or will not suffer from a mental disorder. All of us have, do, and will suffer from quite a few physical disorders. Why should it be so different for mental disorders? It's not as if any of us are born with perfect genes, or are raised by perfect parents, or go through life untouched by stress, trauma, or psychological problems.

The difficulty with stereotyping is also problematic. People receiving psychiatric diagnoses are lumped into diagnostic categories that seem to treat all members of a particular diagnostic grouping as having the same characteristics. The diagnostic system fails to take individual profiles of psychopathology into account with respect to identifying the distinctive patterns of symptoms and presenting problems that particular individuals present.

Most (if not all) mental disorders appear to result from a complex array of interacting biological vulnerabilities and dispositions with a number of significant environmental and psychosocial factors that often exert their effects over a period of time. The symptoms and pathologies of mental disorders appear to be influenced by a wide range of neurobiological, interpersonal, cognitive, and other factors, leading to the development of particular constellations of symptoms and complaints that characterize an individual's psychopathology profile. This complex web of causal factors and the distinctiveness of individual psychopathology profiles are unlikely to be captured by any single diagnostic category. I prefer the more individualized description of persons provided by dimensional models of classification, as for example, the *five-factor model* for the classification of personality disorders.

These five broad domains have been identified as extraversion, agreeableness versus antagonism, conscientiousness, neuroticism or emotional instability, and openness or unconventionality. Each of the five domains can also be differentiated into more specific facets. For example, the domain of agreeableness can be broken down into its underlying components of trust versus mistrust, straightforwardness versus deception, self-sacrifice versus exploitation, compliance versus aggression, modesty versus arrogance, and softheartedness versus callousness.

Most important for clinical psychology, all of the personality disorders are described well in terms of the domains and facets of the five-factor model. For example, antisocial personality disorder includes many of the facets of low conscientiousness (low deliberation, self-discipline, and dutifulness) and high antagonism (callous, exploitative, deceptive, and aggressive). The glib charm and fearlessness seen in the psychopath are represented by abnormally low levels of the neuroticism facets of self-consciousness, anxiousness, and vulnerability. This approach to describing patients provides a more individualized description of each patient, and it might even help somewhat with the stigmatization of a mental disorder diagnosis. All persons vary in the extent of their neuroticism, in the extent to which they are agreeable versus antagonistic, and in the extent to which they're conscientious. Persons with personality disorders would no longer be said to have disorders that are qualitatively distinct from normal psychological functioning but would instead be simply persons who have relatively extreme and maladaptive variants of the personality traits that are evident within all of us.

Critical Thinking

- Do we really need an authoritative diagnostic manual? Why or why not?
- How can we fix the problems of negative, pejorative connotations of diagnoses of mental disorders in our society?

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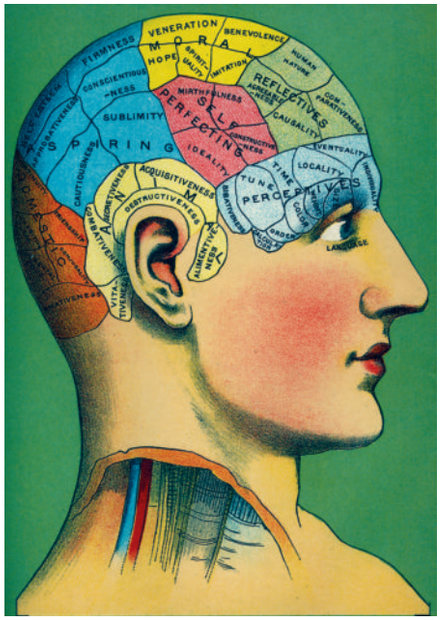
agree on the measured height of the subject. A yardstick that shrinks and expands with the slightest change in temperature will be unreliable. So will one that is difficult to read.

An assessment technique has *internal consistency* if the different parts of the test yield consistent results. For example, if responses to the different items on a depression scale are not highly correlated with each other, the items may not be measuring the same characteristic or trait—in this case, depression. On the other hand, some tests are designed to measure a set of different traits or characteristics. For example, the widely used personality test, the Minnesota Multiphasic Personality Inventory (MMPI), contains subscales measuring various traits related to abnormal behavior.

An assessment method has *test–retest reliability* if it yields similar results on separate occasions. We would not trust a bathroom scale that yielded different results each time we weighed ourselves—unless we had stuffed or starved ourselves between weighings. The same principle applies to methods of psychological assessment.

Finally, an assessment method that relies on judgments from observers or raters must show *interrater reliability*. That is, raters must show a high level of agreement in their ratings. For example, two teachers may be asked to use a behavioral rating scale to evaluate a child's aggressiveness, hyperactivity, and sociability. The scale would have good interrater reliability if both teachers rated the same children in similar ways.



Phrenology. In the 19th century, some people believed that mental faculties and abilities were based in certain parts of the brain and that people's acumen in such faculties could be assessed by gauging the protrusions and indentations of the skull.

Validity

Assessment techniques must also be valid; that is, instruments used in assessment must measure what they intend to measure. Suppose a measure of depression actually turned out to be measuring anxiety. Using such a measure may lead an examiner to a wrong diagnosis. There are different ways of measuring validity, including *content, criterion,* and *construct validity*.

The **content validity** of an assessment technique is the degree to which its content represents the behaviors associated with the trait in question. For example, depression includes features such as sadness and refusal to participate in activities the person once enjoyed. In order to have content validity, then, techniques that assess depression should include items that address these areas.

content validity The degree to which the content of a test or measure represents the content domain of the construct it purports to measure.

Criterion validity represents the degree to which the assessment technique correlates with an independent, external criterion (standard) of what the technique is intended to assess. *Predictive validity* is a form of criterion validity. A test or assessment technique shows good predictive validity if it can be used to predict future performance or behavior. For example, a test measuring antisocial behavior would show predictive validity if people scoring high on the measure later showed more evidence of delinquent or criminal behavior than did low scorers.

criterion validity The degree to which a test correlates with an independent, external criterion or standard.

Another way of measuring criterion validity of a diagnostic test for a particular disorder is to see if it is able to identify people who meet diagnostic criteria for the disorder. Two related concepts are important here: sensitivity and specificity. *Sensitivity* refers to the degree to which a test correctly identifies people who have the disorder the test is intended to detect. Tests that lack sensitivity produce a high number of *false negatives*—individuals identified as not having the disorder who truly have the disorder. *Specificity* refers to the degree to which the test avoids classifying people as having a particular disorder who truly do not have the disorder. Tests that lack specificity produce a high number of *false positives*—people identified as having the disorder who truly do not have the disorder. By taking into account sensitivity and specificity of a given test, we can determine the ability of a test to classify individuals correctly.

Construct validity is the degree to which a test corresponds to the theoretical model of the underlying construct or trait it purports to measure. Let's say we have a test that purports to measure anxiety. Anxiety is not a concrete object or phenomenon. It can't be measured directly, counted, weighed, or touched. Anxiety is a theoretical construct that helps explain phenomena such as a pounding heart or the sudden inability to speak

construct validity The degree to which a test measures the hypothetical construct that it purports to measure.

when you are asking someone out on a date. Anxiety may be indirectly measured by such means as self-report (the client rates the personal level of anxiety) and physiological techniques (measuring the level of sweat on the palms of the client's hands).

The construct validity of a test of anxiety requires the results of the test to predict other behaviors that would be expected, given your theoretical model of anxiety. Let's say your theoretical model predicts that socially anxious college students will have greater difficulties than calmer students in speaking coherently when asking someone for a date, but not when they are merely rehearsing the invitation in private. If the results of an experimental test of these predictions fit these predicted patterns, we could say the evidence supports the test's construct validity (Smith, 2005).

A test may be reliable (give you consistent responses) but still not measure what it purports to measure (be invalid). For example, 19th-century phrenologists believed they could gauge people's personalities by measuring the bumps on their heads. Their calipers provided reliable measures of their subjects' bumps and protrusions; the measurements, however, did not provide valid estimates of subjects' psychological traits. The phrenologists were bumping in the dark, so to speak.

TRUTH or FICTION

Although it is not an exact science, the measurement of the bumps on a person's head can be used to determine the person's personality traits.

✓ **FALSE.** Beliefs in phrenology have long been discredited.

METHODS OF ASSESSMENT

Clinicians use different methods of assessment to arrive at diagnoses, including interviews, psychological testing, self-report questionnaires, behavioral measures, and physiological measures. The role of assessment, however, goes further than classification. A careful assessment provides a wealth of information about clients' personalities and cognitive functioning. This information helps clinicians acquire a broader understanding of their clients' problems and recommend appropriate forms of treatment. In most cases, the formal assessment involves one or more clinical interviews with the client, leading to a diagnostic impression and a treatment plan. In some cases, more formal psychological testing probes the client's psychological problems and intellectual, personality, and neuropsychological functioning.

The Clinical Interview

The *clinical interview* is the most widely used means of assessment. The interview is usually the client's first face-to-face contact with a clinician. Clinicians often begin by asking clients to describe the presenting complaint in their own words, saying something like, "Can you describe to me the problems you've been having lately?" (Therapists learn not to ask, "What brings you here?" to avoid receiving such answers as, "A car," "A bus," or "My social worker.") The clinician will then usually probe aspects of the presenting complaint, such as behavioral abnormalities and feelings of discomfort, the circumstances regarding the onset of the problem, history of past episodes, and how the problem affects the client's daily functioning. The clinician may explore possible precipitating events, such as changes in life circumstances, social relationships, employment, or schooling. The interviewer encourages the client to describe the problem in her or his own words in order to understand it from the client's viewpoint. For example, the interviewer in the case vignette that opened the chapter asked Jerry to discuss the concerns that prompted him to seek help.

Building rapport. By developing rapport and feelings of trust with a client, the skillful interviewer helps put the client at ease and encourages candid communication.

Although the format may vary, most interviews cover these topics:

1. *Identifying data.* Information regarding the client's sociodemographic characteristics: address and telephone number, marital status, age, gender, racial/ethnic characteristics, religion, employment, family composition, and so on.
2. *Description of the presenting problem(s).* How does the client perceive the problem? What troubling behaviors, thoughts, or feelings are reported? How do they affect the client's functioning? When did they begin?
3. *Psychosocial history.* Information describing the client's developmental history: educational, social, and occupational history; early family relationships.

4. *Medical/psychiatric history.* History of medical and psychiatric treatment and hospitalizations: Is the present problem a recurrent episode of a previous problem? How was the problem handled in the past? Was treatment successful? Why or why not?
5. *Medical problems/medication.* Description of present medical problems and present treatment, including medication. The clinician is alert to ways in which medical problems may affect the presenting psychological problem. For example, drugs for certain medical conditions can affect people's moods and general levels of arousal.

The interviewer is attentive to the client's nonverbal as well as verbal behavior, forming judgments about the appropriateness of the client's attire and grooming, apparent mood, and ability to focus attention. Clinicians also judge the clarity or soundness of clients' thought and perceptual processes and level of orientation, or awareness of themselves and their surroundings (who they are, where they are, and what the present date is). These clinical judgments form an important part of the initial assessment of the client's mental state.

Interview Formats There are three general types of clinical interviews. In an **unstructured interview,** the clinician adopts his or her own style of questioning rather than following a standard format. In a **semistructured interview,** the clinician follows a general outline of questions designed to gather essential information but is free to ask the questions in any particular order and to branch off into other directions to follow up on important information. In a **structured interview,** the interview follows a preset series of questions in a particular order.

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structured interview Interview that follows a preset series of questions in a particular order.

The major advantage of the unstructured interview is its spontaneity and conversational style. Because the interviewer is not bound to follow any specific set of questions, there is an active give-and-take with the client. The major disadvantage is the lack of standardization. Different interviewers may ask questions in different ways. For example, one interviewer might ask, "How have your moods been lately?" whereas another might pose the question, "Have you had any periods of crying or tearfulness during the past week or two?" The clients' responses may depend to a certain extent on how the questions are asked. Also, the conversational flow of the interview may fail to touch on important clinical information needed to form diagnostic information, such as suicidal tendencies.

A semistructured interview provides more structure and uniformity, but at the expense of some spontaneity. Some clinicians prefer to conduct a semistructured interview in which they follow a general outline of questions but allow themselves the flexibility to depart from the interview protocol when they want to pursue issues that seem important.

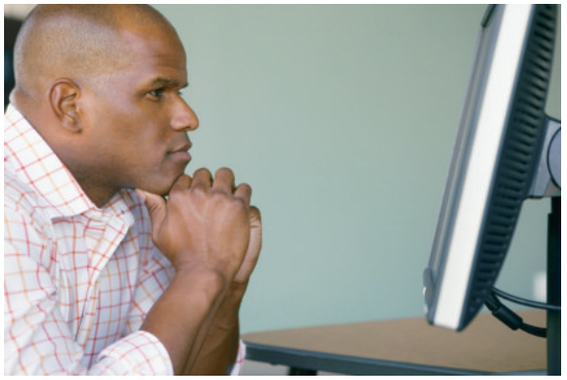
Structured interviews (also called *standardized interviews*) provide the highest level of reliability and consistency in reaching diagnostic judgments, which is why they are used frequently in research settings. The Structured Clinical Interview for the *DSM* (SCID) includes closed-ended questions to determine the presence of behavior patterns that suggest specific diagnostic categories and open-ended questions that allow clients to elaborate their problems and feelings. The SCID guides the clinician in testing diagnostic hypotheses as the interview progresses. Evidence supports the reliability of the SCID across various clinical settings (J. B. Williams et al., 1992).

The interviewer arrives at a diagnostic impression by compiling all the information available: from the interview, from review of the client's background, and from the presenting problems.

Computerized Interviews

Do clinical interviews need to be conducted by a trained, live interviewer? Today, many of us do our banking by computer, order airline tickets over the Internet, and organize our schedules electronically. Might the clinical interviewer be replaced by a computer?

Computerized assessment protocols are becoming more widely used, although it is unlikely they will replace human interviewers anytime soon. In a computerized clinical interview, people respond to questions about their psychological symptoms and related concerns that are posed to them on a computer screen. Interestingly, evidence shows that people tend to reveal as much if not more personal information to a computer than



Computerized interview. Would you be more likely or less likely to tell your problems to a computer than to a person? Computerized clinical interviews have been used for more than 25 years, and some research suggests that the computer may be more sensitive than its human counterpart in teasing out problems.

they do to a human interviewer (Kobak et al., 1997). The computer interview may actually be more helpful in identifying problems that clients are embarrassed or unwilling to report to a live interviewer (Taylor & Luce, 2003). Perhaps people feel less self-conscious if someone isn't looking at them when they are interviewed. Or perhaps the computer seems more willing to take the time to note all complaints.

On the other hand, computers may lack the human touch needed to delve into sensitive concerns such as a person's deepest fears, relationship problems, sexual matters, and the like. A computer also lacks the means of judging the nuances in people's facial expressions that may reveal more about their innermost concerns than their typed or verbal responses. All in all, however, evidence shows that computer programs are as capable as skilled clinicians at obtaining information from clients and reaching an accurate diagnosis (Taylor & Luce, 2003). Computer programs are also less expensive and more time efficient than personal interviews.

Most clients and clinicians respond favorably to computerized assessment, but some do not (Richard & Bobicz, 2003). Most of the resistance to using computer interviews seems to come from clinicians rather than clients. Some clinicians believe that personal, eye-to-eye contact is necessary to tease out a client's underlying concerns. We should also recognize that since computer-administered diagnostic interviews sometimes yield misleading findings, computer assessments should be combined with clinical judgment by a trained clinician (Garb, 2007). Although the computer may never completely replace the human interviewer, a combination of computerized and interviewer-based assessment may strike the best balance of efficiency and sensitivity.

Another change in the offing is the development of online assessments. Some psychologists are now conducting psychological assessments via e-mail, videoconferencing, and the Internet (Naglieri et al., 2004; Shore et al., 2007).

Psychological Tests

A psychological test is a structured method of assessment used to evaluate reasonably stable traits, such as intelligence and personality. Tests are usually standardized on large numbers of subjects and provide norms that compare clients' scores with the average. By comparing test results from samples of people who are free of psychological disorders with those of people who have diagnosable psychological disorders, we may gain some insights into the types of response patterns that are indicative of abnormal behavior. Although we tend to think of medical tests as a "gold standard" of testing, a recent analysis showed that many psychological tests were on par with many medical tests in their ability to predict criterion variables, such as underlying conditions or future outcomes (Daw, 2001; Meyer et al., 2001).

Here we examine two major types of psychological tests: intelligence tests and personality tests.

Intelligence Tests The assessment of abnormal behavior often includes an evaluation of intelligence. Formal intelligence tests are used to help diagnose mental retardation (discussed in Chapter 14). They evaluate the intellectual impairment that may be caused by other disorders, such as organic mental disorders caused by damage to the brain. They also provide a profile of the client's intellectual strengths and weaknesses to help develop a treatment plan suited to the client's competencies.

Attempts to define intelligence continue to stir debate in the field. David Wechsler (1975), the originator of the most widely used intelligence tests, the Wechsler scales, defined intelligence as "capacity . . . to understand the world . . . and . . . resourcefulness to cope with its challenges." From his perspective, intelligence has to do with the ways in which we (a) mentally represent the world and (b) adapt to its demands.

The first formal intelligence test was developed by a Frenchman, Alfred Binet (1857–1911). In 1904, Binet was commissioned by school officials in Paris to develop a mental test to identify children who were unable to cope with the demands of regular

classroom instruction and who required special classes to meet their needs. Binet and a colleague, Theodore Simon, developed an intelligence test consisting of memory tasks and other short tests of mental abilities that children were likely to encounter in daily life, such as counting. A later version of their test, called the Stanford-Binet Intelligence Scale, is still widely used to measure intelligence in children and young adults.

Intelligence, as given by a person's scores on intelligence tests, is usually expressed in the form of an intelligence quotient, or IQ. An IQ score is typically based on the relative difference (deviation) of a person's score on an intelligence test from the norms of the person's age group. A score of 100 is defined as the mean. People who answer more items correctly than the average obtain IQ scores above 100; those who answer fewer items correctly obtain scores of less than 100.

Wechsler's intelligence scales are today the most widely used intelligence tests. Different versions are used for different age groups. The Wechsler scales group questions into subtests or subscales, with each subscale measuring a different intellectual ability. (Table 3.7 shows examples from the adult version of the test.) The Wechsler scales are thus designed to offer insight into a person's relative strengths and weaknesses, and not simply yield an overall score.

Wechsler's scales include both *verbal* and *performance* subtests to compute verbal and performance IQs. Verbal subtests generally require knowledge of verbal concepts; performance subtests rely more on spatial relations skills. (Figure 3.1 shows items similar to those on the performance subscales of the Wechsler scales.)

Wechsler IQ scores are based on how respondents' answers deviate from those attained by their age-mates. The mean whole test score at any age is defined as 100. Wechsler distributed IQ scores so that 50% of the scores of the population would lie within a "broad average" range of 90 to 110.

Most IQ scores cluster around the mean (see Figure 3.2). Just 5% of them are above 130 or below 70. Wechsler labeled people who attained scores of 130 or above as "very superior" and those with scores below 70 as "intellectually deficient."

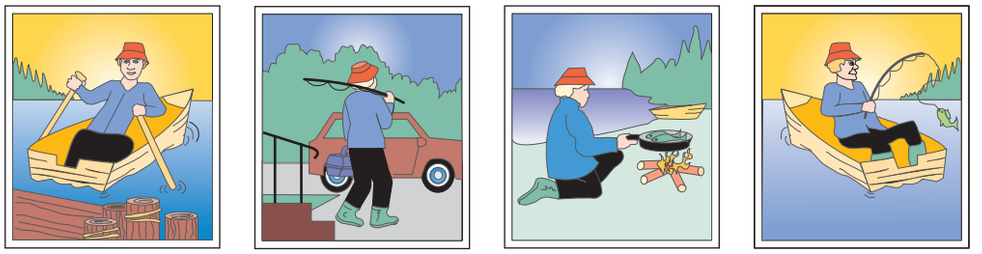
Clinicians use IQ scales to evaluate a client's intellectual resources and to help diagnose mental retardation. IQ scores below 70 are one of the criteria used in diagnosing mental retardation. Next we consider two major types of tests used to assess personality: *objective tests* and *projective tests*. Clinicians use personality tests to learn more about the client's underlying personality traits, needs, interests, and concerns.

TABLE 3.7

Examples of Items Similar to those on the Wechsler Adult Intelligence Scale

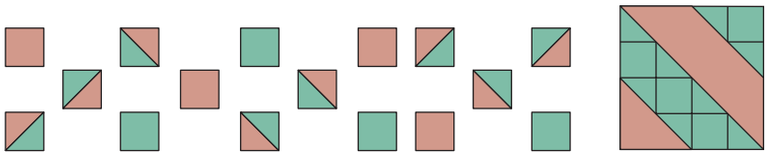
Verbal Subtests	Performance Subtests
Information Who wrote *Paradise Lost?*	**Digit Symbol** Given a key showing a set of symbols that correspond to particular numbers, fill in the correct symbols for a series of numbers.
Comprehension Why do people need to obey traffic laws? What does the saying "The early bird catches the worm" mean?	**Picture Completion** Identify the missing part from a picture, such as the picture of the watch in Figure 3.1.
Arithmetic John wanted to buy a shirt that cost $31.50, but only had 17 dollars. How much more money would he need to buy the shirt?	**Block Design** Using blocks such as those in Figure 3.1, match the design shown.
Similarities How are a stapler and a paper clip alike?	**Picture Arrangement** Arrange the pictures in the correct order to tell a story.
Digit Span (Forward order) Listen to this series of numbers and repeat them back to me in the same order: 6 4 5 2 7 3 (Backward order) Listen to this series of numbers and then repeat them backward: 9 4 2 5 8 7.	**Object Assembly** Arrange the pieces of the puzzle so that they form a meaningful object.
Vocabulary What does *capricious* mean?	

Source: Adapted from "Examples of Items Similar to Those on the WAIS-III" from Nevid, J.S. *Psychology: Concepts and Applications*, Second Edition, (Boston: Houghton Mifflin, 2007), p. 282. Reprinted by permission.

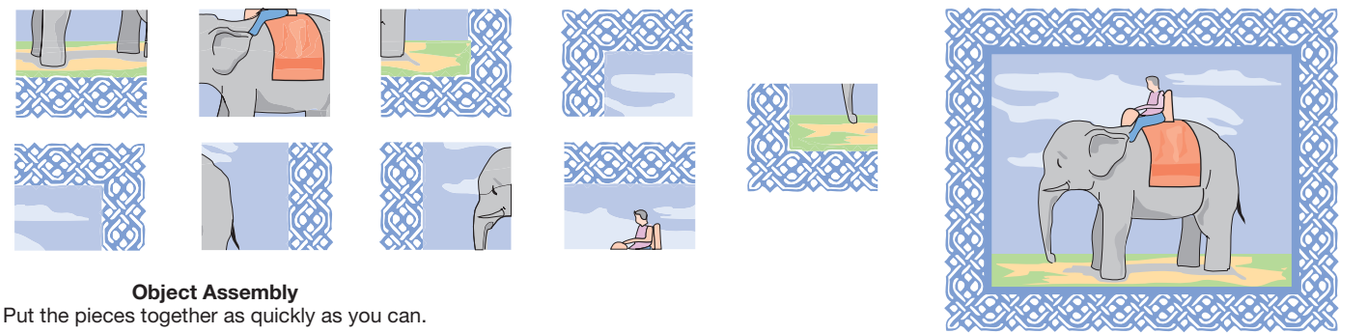


Picture Arrangement
These pictures tell a story but they are in the wrong order. Put them in the right order so that they tell a story.

Picture Completion
What part is missing from this picture?



Block Design
Put the blocks together to make this picture.



Object Assembly
Put the pieces together as quickly as you can.

FIGURE 3.1 Items similar to those found on the performance subtests of the Wechsler Intelligence Scale (WAIS). The Wechsler scales yield verbal and performance IQs that are based on the extent to which an individual's test scores deviate from the norm for her or his age group.

Source: From the Wechsler Intelligence Scales for Adults and Children. Copyright © 1949, 1955, 1974, 1981, 1991, 1997, 2003 by The Psychological Corporation, a Harcourt Assessment Company. Reproduced by permission. All rights reserved. Wechsler® is a trademark of The Psychological Corporation registered in the United States of America and/or other jurisdictions.

objective tests Self-report personality tests that can be scored objectively and that are based on a research foundation.

TRUTH or FICTION

An objective test of personality is one that does not require any subjective judgments on the part of the person taking the test.

☑ **FALSE.** Objective personality tests are self-report instruments that rely on individuals providing subjective judgments about themselves. They are considered objective in the sense that they have limited response options that can be scored objectively.

Objective Tests Do you like automobile magazines? Are you easily startled by noises in the night? Are you bothered by periods of anxiety or shakiness? **Objective tests** are self-report personality inventories that use items similar to these to measure personality traits such as emotional instability, masculinity-femininity, and introversion. People are asked to respond to specific questions or statements about their feelings, thoughts, concerns, attitudes, interests, beliefs, and the like.

What makes personality tests *objective*? These tests are not objective in the sense that a bathroom scale is an objective measure of weight. After all, these tests rely on subjects giving subjective reports of their interests, feeling states, and so on. Rather, we consider these tests objective in the sense that they limit the range of possible responses and so can be scored objectively. They are also considered objective because they were developed based on empirical evidence supporting their validity. Subjects might be instructed to check adjectives that apply to them, to mark statements as true or false, to select preferred activities from lists, or to indicate whether items apply to them "always," "sometimes," or "never." For example, a test item may ask you to check either "true" or "false" to a statement like, "I feel uncomfortable in crowds." Here we focus on two of the more widely used objective personality tests in clinical settings, the Minnesota Multiphasic Personality Inventory (MMPI; now in a revised edition called the MMPI-2) and the Millon Clinical Multiaxial Inventory (MCMI).

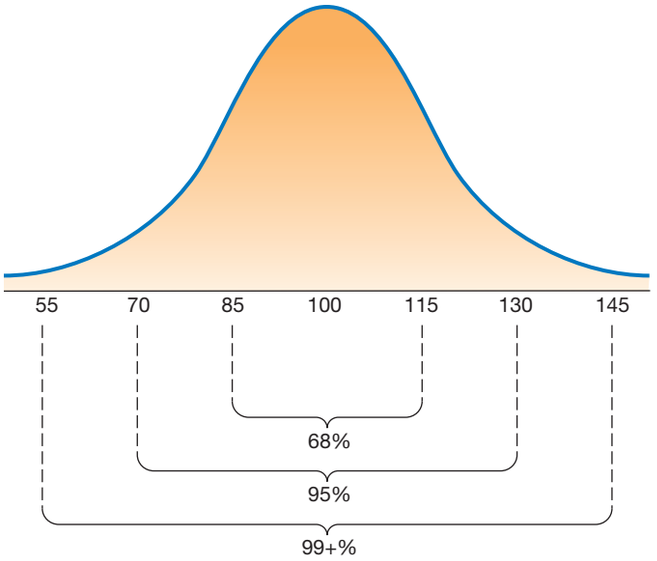


FIGURE 3.2 Normal distribution of IQ scores.
The distribution of IQ scores is based on a bell-shaped curve, which is referred to by psychologists as a normal curve. Wechsler defined the deviation IQ so that the average (mean) score was 100 and the standard deviation of scores was 15. A standard deviation is a statistical measure of the variability or dispersion of scores around the mean. Here we see the distribution of scores at one, two, and three standard deviations from the mean. Note also that 50% of the scores fall within the broad average range of 90 to 110.

Minnesota Multiphasic Personality Inventory (MMPI-2) The MMPI-2 contains more than 500 true-false statements that assess interests, habits, family relationships, physical (somatic) complaints, attitudes, beliefs, and behaviors characteristic of psychological disorders. It is widely used as a test of personality as well as to assist clinicians in diagnosing abnormal behavior patterns. The MMPI-2 consists of a number of individual scales comprised of items that tended to be answered differently by members of carefully selected diagnostic groups, such as patients diagnosed with schizophrenia or depression, than by members of reference groups.

Consider a hypothetical item: "I often read detective novels." If, for example, groups of depressed people tended to answer the item in a direction different from normal groups, the item would be placed on the depression scale. Many items that discriminate normal people from clinical groups are transparent in meaning, such as "I feel down much of the time." However, some items are more subtle in meaning or bear no obvious relationship to the measured trait. For example, a hypothetical item such as "I think people would be better off if they spent more time taking trains to flying whenever possible."

The items on the MMPI are divided into various clinical scales (see Table 3.8). A score of 65 or higher on a particular scale is considered clinically significant. The MMPI-2 also includes validity scales that assess tendencies to distort test responses in a favorable ("faking good") or unfavorable ("faking bad") direction. Other scales on the tests, called *content scales,* measure an individual's specific complaints and concerns, such as anxiety, anger, family problems, and problems of low self-esteem.

The MMPI-2 is interpreted according to individual scale elevations and interrelationships among scales. For example, a "2–7 profile," commonly found among people seeking therapy, refers to a test pattern in which scores for Scales 2 ("Depression") and 7 ("Psychasthenia") are clinically significant. Clinicians may refer to "atlases," or descriptions, of people who usually attain various profiles.

MMPI-2 scales are regarded as reflecting continua of personality traits associated with the diagnostic categories represented by the test. For example, a high score on Scale 4, psychopathic deviation, suggests that the respondent holds a higher-than-average number of nonconformist beliefs and may be rebellious, which are characteristics often found in people with antisocial personality disorder. However, because it is not tied specifically to *DSM* criteria, this score cannot be used to establish a diagnosis. The MMPI, which was originally developed in the 1930s and 1940s, cannot provide diagnostic judgments consistent with the current version of the *DSM* system. Even so, MMPI profiles may suggest possible diagnoses that can be considered in the light of other evidence. Moreover, many clinicians use the MMPI to gain general information

TABLE 3.8

Clinical Scales of the MMPI-2

Scale Number	Scale Label	Items Similar to Those Found on MMPI Scale	Sample Traits of High Scorers
1	Hypochondriasis	My stomach frequently bothers me. At times, my body seems to ache all over.	Many physical complaints, cynical defeatist attitudes, often perceived as whiny, demanding
2	Depression	Nothing seems to interest me anymore. My sleep is often disturbed by worrisome thoughts.	Depressed mood; pessimistic, worrisome, despondent, lethargic
3	Hysteria	I sometimes become flushed for no apparent reason. I tend to take people at their word when they're trying to be nice to me.	Naive, egocentric, little insight into problems, immature; develops physical complaints in response to stress
4	Psychopathic deviate	My parents often disliked my friends. My behavior sometimes got me into trouble at school.	Difficulties incorporating values of society, rebellious, impulsive, antisocial tendencies; strained family relationships; poor work and school history
5	Masculinity-Femininity	I like reading about electronics. (M) I would like to work in the theater. (F)	Males endorsing feminine attributes: have cultural and artistic interests, effeminate, sensitive, passive; Females endorsing male interests: Aggressive, masculine, self-confident, active, assertive, vigorous
6	Paranoia	I would have been more successful in life but people didn't give me a fair break. It's not safe to trust anyone these days.	Suspicious, guarded, blames others, resentful, aloof, may have paranoid delusions
7	Psychasthenia	I'm one of those people who have to have some thing to worry about. I seem to have more fears than most people I know.	Anxious, fearful, tense, worried, insecure, difficulties concentrating, obsessional, self-doubting
8	Schizophrenia	Things seem unreal to me at times. I sometimes hear things that other people can't hear.	Confused and illogical thinking, feels alienated and misunderstood, socially isolated or withdrawn, may have blatant psychotic symptoms such as hallucinations or delusional beliefs, or may lead detached, schizoid lifestyle
9	Hypomania	I sometimes take on more tasks than I can possibly get done. People have noticed that my speech is sometimes pressured or rushed.	Energetic, possibly manic, impulsive, optimistic, sociable, active, flighty, irritable, may have overly inflated or grandiose self-image or unrealistic plans
10	Social Introversion	I don't like loud parties. I was not very active in school activities.	Shy, inhibited, withdrawn, introverted, lacks self confidence, reserved, anxious in social situations

about respondents' personality traits and attributes that may underlie their psychological problems, rather than a diagnosis per se.

The validity of the MMPI-2 is supported by a large body of research findings (Garb, 2003; Kubisyzn et al., 2000). The test successfully discriminates between psychiatric patients and controls and between groups of people with different psychological disorders, such as anxiety versus depressive disorders (Ganellen, 1996; Graham, 2006). Moreover, the content scales of the MMPI-2 provide additional information to that provided by the clinical scales, which can help clinicians learn more about the client's specific problems (Graham, 2006; McGrath, Pogge, & Stokes, 2002; Sellbom, Graham, & Schenk, 2006).

The Millon Clinical Multiaxial Inventory (MCMI) The MCMI was developed to help the clinician make diagnostic judgments within the *DSM* system, especially for personality disorders found on Axis II (Millon, 2003). The MCMI (now in a third edition) is the only objective personality test that focuses specifically on personality disorders. The MMPI-2, by contrast, focuses on personality traits associated with Axis I diagnoses, such as mood disorders, anxiety disorders, and schizophrenic disorders. Some clinicians may use both instruments to capture a wider range of personality traits. Evidence indicates that the MCMI is useful in helping clinicians discriminate among various Axis I and Axis II disorders (Kubiszyn et al., 2000; Salekin et al., 2003). However, relationships between the MCMI and the underlying personality disorders it is intended to assess requires further study (Blais et al., 2003).

Evaluation of Objective Tests Objective or self-report tests are relatively easy to administer. Once the examiner has read the instructions to clients and made sure they can read and comprehend the items, clients can complete the tests unattended. Because the tests permit limited response options, such as marking items either true or false, they can be scored with high interrater reliability. Moreover, the accumulation of research findings on respondents provides a quantified basis for interpreting test responses. Such tests often reveal information that might not be revealed during a clinical interview or by observing the person's behavior. For example we might learn that a person harbors negative views of himself or herself—self-perceptions that may not be directly expressed in behavior or revealed during an interview. A disadvantage of self-rating tests is that they rely on individuals themselves as the sole source of information (Vazire, 2006). Test responses may therefore reflect underlying biases people may have when they evaluate themselves or their behavior, such as tendencies to give socially desirable responses that may not reflect their true feelings. For this reason, self-report inventories, such as the MMPI, contain validity scales to help ferret out response biases. Yet even these validity scales may not detect all sources of bias. Examiners may also look for corroborating information, such as interviewing others who are familiar with the client's behavior.

Tests are also only as valid as the criteria that were used to validate them. The original MMPI was limited in its role as a diagnostic instrument by virtue of the obsolete diagnostic categories that were used to classify the original clinical groups. Moreover, if a test does nothing more than identify people who are likely to have a particular disorder, its utility is usurped by more economical means of arriving at diagnoses, such as a structured clinical interview. We expect more from personality tests than diagnostic classification and the MMPI has shown its value in providing information about underlying personality traits and interest patterns. Psychodynamically oriented critics suggest that self-report instruments tell us little about possible unconscious processes. The use of such tests may also be limited to relatively high functioning individuals who can read well, respond to verbal material, and focus on a potentially tedious task. Clients who are disorganized, unstable, or confused may not be able to complete the tests.

Projective Tests A **projective test,** unlike an objective test, offers no clear, specified response options. Clients are presented with ambiguous stimuli, such as inkblots, and asked to respond to them. The word *projective* is used because these personality tests derive from the psychodynamic belief that people impose, or "project," their own psychological needs, drives, and motives, much of which lie in the unconscious, onto their interpretations of ambiguous stimuli.

projective tests Psychological tests that present ambiguous stimuli onto which the examinee is thought to project his or her personality and unconscious motives.

The psychodynamic model holds that potentially disturbing impulses and wishes, often of a sexual or aggressive nature, are often hidden from consciousness by our defense mechanisms. Indirect methods of assessment, however, such as projective tests, may offer clues to unconscious processes. More behaviorally oriented critics contend, however, that the results of projective tests are based more on clinicians' subjective interpretations of test responses than on empirical evidence.

TRUTH or FICTION

One of the most widely used tests of personality asks people to interpret what they see in a series of inkblots.

✓ **TRUE.** The Rorschach is a widely used personality test in which a person's responses to inkblots are interpreted to reveal aspects of his or her personality.

Many projective tests have been developed, including tests based on how people fill in missing words to complete sentence fragments or how they draw human figures and other objects. The two most prominent projective techniques are the Rorschach Inkblot Test and the Thematic Apperception Test (TAT).

The Rorschach Test The Rorschach test was developed by a Swiss psychiatrist, Hermann Rorschach (1884–1922). As a child, Rorschach was intrigued by the game of dripping ink on paper and folding the paper to make symmetrical figures. He noted that people saw different things in the same blot, and he believed their "percepts" reflected their personalities as well as the stimulus cues provided by the blot. Rorschach's fraternity nickname was *Klex,* which means "inkblot" in German ("Time Capsule," 2000). As a psychiatrist, Rorschach experimented with hundreds of blots to identify those that could help in the diagnosis of psychological problems. He finally found a group of 15 blots that seemed to do the job and could be administered in a single session. Ten blots are used today because Rorschach's publisher did not have the funds to reproduce all 15 blots in the first edition of the text on the subject. Rorschach never had the opportunity to learn how popular and influential his inkblot test would become. Sadly, 7 months after the publication of the test that bears his name, Rorschach died at age 37 of complications from a ruptured appendix (Exner, 2002).

Five of the inkblots are black and white, and the other five have color (see Figure 3.3). Each inkblot is printed on a separate card, which is handed to subjects in sequence. Subjects are asked to tell the examiner what the blot might be or what it reminds them of. Then, they are asked to explain what features of the blot (its color, form, or texture) they used to form their perceptions.

Clinicians who use the Rorschach form interpretations based on the content and the form of the responses. For example, they may infer that people who use the entire blot in their responses show an ability to integrate events in meaningful ways. Those who focus on minor details of the blots may have obsessive–compulsive tendencies, whereas clients who respond to the negative (white) spaces may see things in their own idiosyncratic ways, suggesting underlying negativism or stubbornness.

reality testing The ability to perceive the world accurately and to distinguish reality from fantasy.

A response consistent with the form or contours of the blot is suggestive of adequate **reality testing.** People who see movement in the blots may be revealing intelligence and creativity. Content analysis may shed light on underlying conflicts. For example, adult clients who see animals but no people may have problems relating to people. Clients who appear confused about whether or not percepts of people are male or female may, according to psychodynamic theory, be in conflict over their own gender identity.

The Thematic Apperception Test (TAT) The Thematic Apperception Test (TAT) was developed by psychologist Henry Murray (1943) at Harvard University in the 1930s. *Apperception* is a French word that can be translated as "interpreting (new ideas or impressions) on the basis of existing ideas (cognitive structures) and past experience." The TAT consists of a series of cards, each depicting an ambiguous scene (see Figure 3.4). It is assumed that clients' responses to the cards will reflect their experiences and outlooks on life—and, perhaps, shed light on their deep-seated needs and conflicts.

Respondents are asked to describe what is happening in each scene, what led up to it, what the characters are thinking and feeling, and what will happen next. Psychodynamic theorists believe that people will identify with the protagonists in their stories and project underlying psychological needs and conflicts into their responses. More superficially, the stories suggest how respondents might interpret or behave in similar situations in their own lives. TAT results may also be suggestive of clients' attitudes toward others, particularly family members and lovers.

Evaluation of Projective Techniques The reliability and validity of projective techniques continues to be a subject of extensive research and ongoing debate. For one thing,

FIGURE 3.3 "What does this look like?" In the Rorschach test, a person is presented with ambiguous stimuli in the form of inkblots and asked to describe what each of the blots looks like. Rorschach assumed that people project aspects of their own personalities into their responses, but controversy still whirls around the question of whether the test yields scientifically valid conclusions.

interpretation of a person's responses depends to some degree on the subjective judgment of the examiner. For example, two examiners may interpret the same Rorschach or TAT response differently.

Although more comprehensive scoring systems have improved standardization of scoring the Rorschach, the reliability of the test continues to be debated (see Acklin et al., 2000). Even if a Rorschach response can be scored reliably, the interpretation of the response—what it means—remains an open question (Garb et al., 2005).

Evidence supports the use of at least some limited uses of the Rorschach (e.g., Blais et al., 2001; G. J. Meyer, 2001). For example, Rorschach indicators may be useful in distinguishing between different types of psychological disorders (Dao & Prevatt, 2006; Kubiszyn et al., 2000), in detecting dependency behaviors and some forms of disturbed thinking (Lilienfeld, Fowler, & Lohr, 2003), and in predicting treatment outcomes in psychotherapy (G. J. Meyer, 2000).

Some reviewers find the overall validity of the Rorschach to be generally on par with that of other psychological tests, such as the MMPI (e.g., Meyer et al., 2001; Meyer & Archer, 2001; Weiner, Spielberger, & Abeles, 2002, 2003). However, other reviewers claim the Rorschach fails to meet overall tests of scientific utility or validity (Garb et al., 2002; Hamel et al., 2003; Hunsley & Bailey, 2001; Lilienfeld, Wood, & Garb, 2000). The debate over the validity and clinical utility of the Rorschach continues to rage between supporters and detractors with no clear resolution in sight.

One criticism of the TAT is that the stimulus properties of some of the cards, such as cues depicting sadness or anger, may exert too strong a "stimulus pull" on the subject. If so, clients' responses may represent reactions to the stimulus cues rather than projections of their personalities (Murstein & Mathes, 1996). The validity of the TAT in eliciting deep-seated material or tapping underlying psychopathology also remains to be demonstrated. However, evidence does indicate that it can discriminate between different types of Axis I and Axis II disorders (Kubiszyn et al., 2000).

Although many critics would like to see projective tests scrapped, others argue that in skilled hands, tests such as the TAT and the Rorschach can yield meaningful material that might not be revealed in interviews or by self-rating inventories (Stricker & Gold, 1999). Moreover, allowing subjects freedom of expression through projective testing reduces the tendency of individuals to offer socially desirable responses. George Stricker (2003) appraised the present standoff in the field as follows: "The field remains divided between believers and nonbelievers, and each is able to marshal considerable evidence and discount the evidence of their opponents to support their point of view" (p. 728).

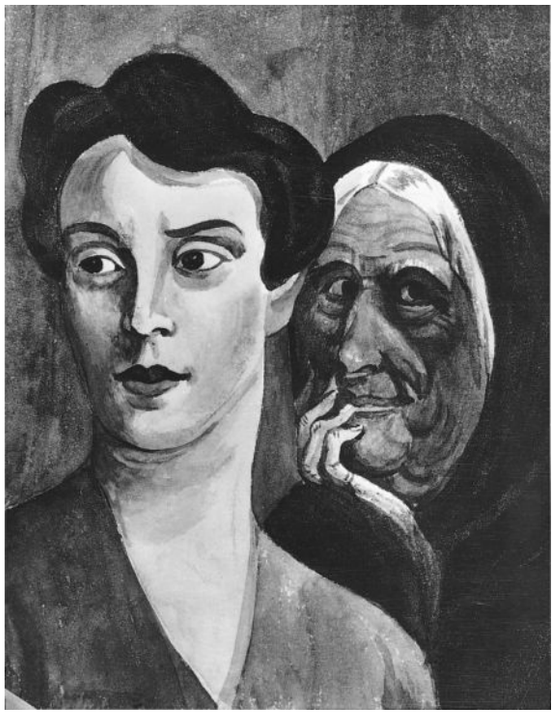


FIGURE 3.4 "Tell me a story."
In the Thematic Apperception Test (TAT), the person is presented with a series of pictures, such as this one depicted here, and asked to tell a story about what is happening in the scene. The person is also asked to describe what events led up to the scene and how the story will turn out. How might the stories you tell reveal underlying aspects of your personality?

Neuropsychological Assessment

neuropsychological assessment
Measurement of behavior or performance that may be indicative of underlying brain damage or defects.

Neuropsychological assessment involves the use of tests to help determine whether psychological problems reflect underlying neurological impairment or brain damage. When neurological impairment is suspected, a neurological evaluation may be requested from a *neurologist*—a medical doctor who specializes in disorders of the nervous system. A clinical *neuropsychologist* may also be consulted to administer neuropsychological assessment techniques, such as behavioral observation and psychological testing, to reveal signs of possible brain damage. Neuropsychological testing may be used together with brain-imaging techniques such as the MRI and CT to shed light on relationships between brain function and underlying abnormalities (Fiez, 2001). The results of neuropsychological testing may not only suggest whether patients suffer from brain damage but also point to the parts of the brain that may be affected.

The Bender Visual Motor Gestalt Test One of the first neuropsychological tests to be developed and still one of the most widely used neuropsychological tests is the Bender Visual Motor Gestalt Test, now in a second edition, the Bender-Gestalt II (Brannigan & Decker, 2006; Raphael, Golden, & Cassidy-Feltgen, 2002). "The Bender" consists of geometric figures that illustrate various Gestalt principles of perception. The client is asked to copy geometric designs, and signs of possible brain damage include rotation of the figures, distortions in shape, and incorrect sizing of the figures in relation to one another (see Figure 3.5). The examiner then asks the client to reproduce the designs from memory, because neurological damage can impair memory functioning. Although the Bender remains a convenient and economical means of uncovering possible organic impairment, more sophisticated test batteries have been developed for this purpose, including the widely used Halstead-Reitan Neuropsychological Battery.

The Halstead-Reitan Neuropsychological Battery Psychologist Ralph Reitan developed the battery by adapting tests used by his mentor, Ward Halstead, an experimental psychologist, to study brain–behavior relationships among organically impaired individuals. The battery contains tests that measure perceptual, intellectual,

and motor skills and performance. A battery of tests permits the psychologist to observe patterns of results, and various patterns of performance deficits are suggestive of certain kinds of brain defects, such as those occurring following head trauma (Loring & Larrabee, 2006; Reitan & Wolfson, 2000). The Halstead-Reitan test battery comprises a number of subtests, including the following:

1. *The Category Test.* This test measures abstract thinking ability, as indicated by the individual's proficiency at forming principles or categories that relate different stimuli to one another. A series of groups of stimuli that vary in shape, size, location, color, and other characteristics are flashed on a screen. The subject's task is to discern the principle that links them, such as shape or size, and to indicate which stimuli in each grouping represent the correct category by pressing a key. By analyzing the patterns of correct and incorrect choices, the subject normally learns to identify the principles that determine the correct choice. Performance on the test is believed to reflect functioning in the frontal lobe of the cerebral cortex.
2. *The Rhythm Test.* This is a test of concentration and attention. The subject listens to 30 pairs of tape-recorded rhythmic beats and indicates whether the beats in each pair are the same or different. Performance deficits are associated with damage to the right temporal lobe of the cerebral cortex.
3. *The Tactual Performance Test.* This test requires the blindfolded subject to fit wooden blocks of different shapes into corresponding depressions on a form board. Afterward, the subject draws the board from memory as a measure of visual memory.

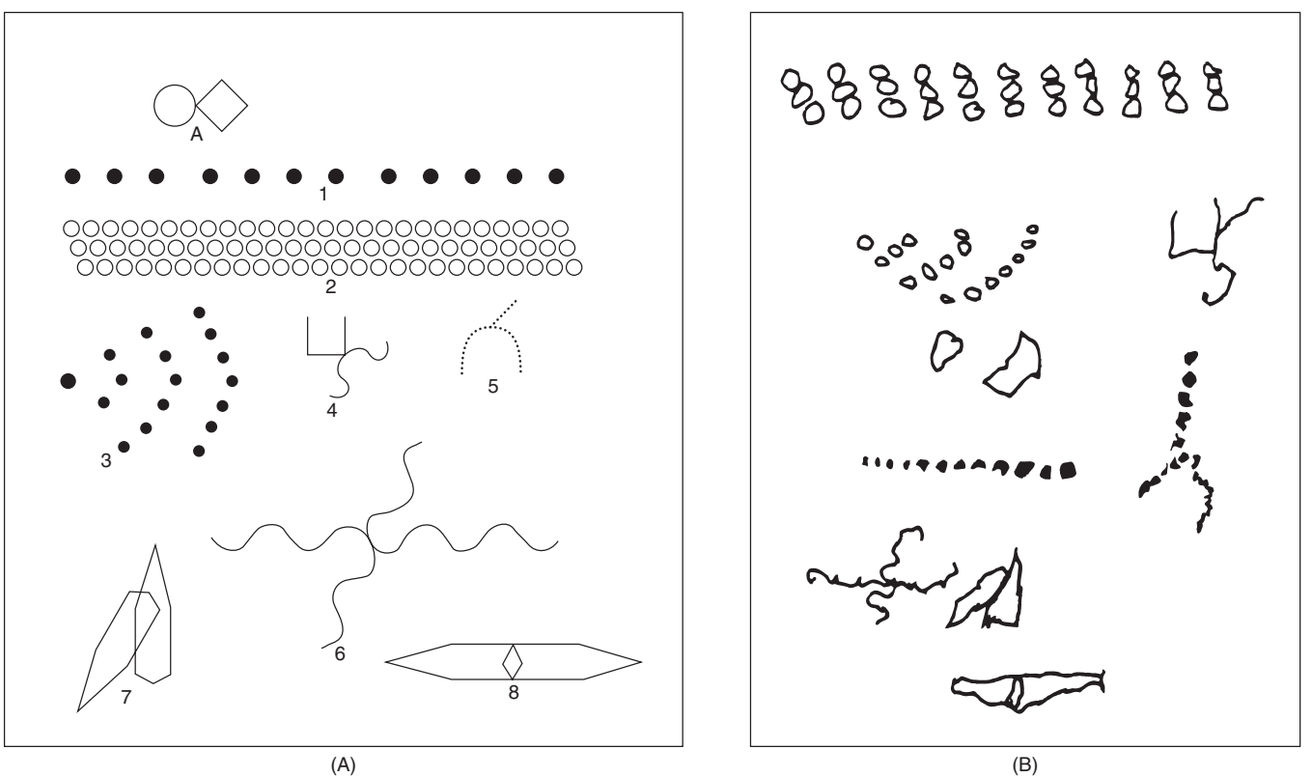


FIGURE 3.5 The Bender Visual Motor Gestalt Test.
The "Bender" is intended to assess organic impairment. Part A shows the series of figures respondents are asked to copy. Part B shows the drawings of a person who is known to be brain damaged.

Behavioral Assessment

behavioral assessment The approach to clinical assessment that focuses on the objective recording and description of problem behavior.

Traditional personality tests such as the MMPI, Rorschach, and TAT were designed to measure underlying psychological traits and dispositions. Test responses are interpeted as *signs* of traits and dispositions believed to play important roles in determining people's behavior. For example, certain Rorschach responses are interpreted as revealing underlying traits, such as psychological dependency, that are believed to influence how people relate to others. In contrast, **behavioral assessment** treats test results as *samples* of behavior that occur in specific situations rather than as *signs* of underlying personality traits. According to the behavioral approach, behavior is primarily determined by environmental or situational factors, such as stimulus cues and reinforcement, not by underlying traits.

Behavioral assessment aims to sample an individual's behavior in settings as similar as possible to the real-life situation, thus maximizing the relationship between the testing situation and the criterion. Behavior may be observed and measured in such settings as the home, school, or work environment. The examiner may also try to simulate situations in the clinic or laboratory that serve as analogues of the problems the individual confronts in daily life.

The examiner may conduct a *functional analysis* of the problem behavior—an analysis of the problem behavior in relation to antecedents, or stimulus cues that trigger it, and consequences, or reinforcements that maintain it. Knowledge of the environmental conditions in which a problem behavior occurs may help the therapist work with the client and the family to change the conditions that trigger and maintain it. The examiner may conduct a *behavioral interview* by posing questions to learn more about the history and situational aspects of problem behavior. For example, if a client seeks help because of panic attacks, the behavioral interviewer might ask how the client

Kerry, the "Royal Terror"

A 7-year-old boy, Kerry, is brought by his parents for evaluation. His mother describes him as a "royal terror." His father complains he won't listen to anyone. Kerry throws temper tantrums in the supermarket, screaming and stomping his feet if his parents refuse to buy him what he wants. At home, he breaks his toys by throwing them against the wall and demands new ones. Sometimes, though, he appears sullen and won't talk to anyone for hours. At school he appears inhibited and has difficulty concentrating. His progress at school is slow, and he has difficulty reading. His teachers complain he has a limited attention span and doesn't seem motivated.

—From the Author's Files

experiences these attacks—when, where, how often, under what circumstances. The interviewer looks for precipitating cues, such as thought patterns (e.g., thoughts of dying or losing control) or situational factors (e.g., entering a department store) that may provoke an attack. The interviewer also seeks information about reinforcers that may maintain the panic. Does the client flee the situation when an attack occurs? Is escape reinforced by relief from anxiety? Has the client learned to lessen anticipatory anxiety by avoiding exposure to situations in which attacks have occurred?

The examiner may also use observational methods to connect the problem behavior to the stimuli and reinforcements that help maintain it. Consider the case of Kerry. The psychologist may use direct home observation to assess the interactions between Kerry and his parents. Alternatively, the psychologist may observe Kerry and his parents through a one-way mirror in the clinic. Such observations may suggest interactions that explain the child's noncompliance. For example, Kerry's noncompliance may follow parental requests that are vague (e.g., a parent says, "Play nicely now," and Kerry

responds by throwing toys) or inconsistent (e.g., a parent says, "Go play with your toys but don't make a mess," to which Kerry responds by scattering the toys). Observation may suggest ways in which Kerry's parents can improve communication and cue and reinforce desirable behaviors.

Direct observation, or behavioral observation, is the hallmark of behavioral assessment. Through direct observation, clinicians can observe and quantify problem behavior. Observations may be videotaped to permit subsequent analysis of behavioral patterns. Observers are trained to identify and record targeted patterns of behavior. Behavior coding systems have been developed that enhance the reliability of recording.

There are both advantages and disadvantages to direct observation. One advantage is that direct observation does not rely on the client's self-reports, which may be distorted by efforts to make a favorable or unfavorable impression. In addition to providing accurate measurements of problem behavior, behavioral observation can suggest strategies for intervention. A mother might report that her son is so hyperactive he cannot sit still long enough to complete homework assignments. By using a one-way mirror, the clinician may discover that the boy becomes restless only when he encounters a problem he cannot solve right away. The child may then be helped by being taught ways of coping with frustration and of solving certain kinds of academic problems.

Direct observation also has its drawbacks. One issue is the possible lack of consensus in defining problems in behavioral terms. In coding the child's behavior for hyperactivity, clinicians must agree on which aspects of the child's behavior represent hyperactivity. Another potential problem is a lack of reliability, or inconsistency, of measurement across time or between observers. Reliability is reduced when an observer is inconsistent in the coding of specific behaviors or when two or more observers code behavior inconsistently.

Observers may also show response biases. An observer who has been sensitized to expect that a child is hyperactive may perceive normal variations in behavior as subtle cues of hyperactivity and erroneously record them as instances of hyperactive behavior. We can help minimize these biases by keeping observers uninformed or "blind" about the target subject they are observing.

Reactivity is another potential problem. Reactivity refers to the tendency for the behavior being observed to be influenced by the way in which it is measured. For example, people may put their best feet forward when they know they are being observed. Using covert observation techniques, such as hidden cameras or one-way mirrors, may reduce reactivity. Covert observation may not be feasible, however, because of ethical concerns or practical constraints. Another approach is to accustom subjects to observation by watching them a number of times before collecting data. Another potential problem is *observer drift*—the tendency of observers, or groups of raters, to deviate from the coding system in which they were trained as time elapses. One suggestion to help control this problem is to regularly retrain observers to ensure continued compliance with the coding system (Kazdin, 1992). As time elapses, observers may also become fatigued or distracted. It may be helpful to limit the duration of observations and to provide frequent breaks.

Behavioral observation is limited to measuring overt behaviors. Many clinicians also wish to assess subjective or private experiences—for example, feelings of depression and anxiety or distorted thought patterns. Such clinicians may combine direct observation with forms of assessment that permit clients to reveal internal experiences. Staunch behavioral clinicians tend to consider self-reports unreliable and to limit their data to direct observation.

In addition to behavioral interviews and direct observation, behavioral assessment may involve the use of other techniques, such as self-monitoring, contrived or analogue measures, and behavioral rating scales.

Self-Monitoring Training clients to record or monitor the problem behavior in their daily lives is another method of relating problem behavior to the settings in which it occurs. In **self-monitoring,** clients assume the responsibility for assessing the problem behavior in the settings in which it naturally occurs.

self-monitoring The process of observing or recording one's own behaviors, thoughts, or emotions.

Behaviors that can be easily counted, such as food intake, cigarette smoking, nail biting, hair pulling, study periods, or social activities, are well suited for self-monitoring. Self-monitoring can produce highly accurate measurement, because the behavior is recorded as it occurs, not reconstructed from memory.

There are various devices for keeping track of the targeted behavior. A behavioral diary or log is a handy way to record calories ingested or cigarettes smoked. Such logs can be organized in columns and rows to track the frequency of occurrence of the problem behavior and the situations in which it occurs (time, setting, feeling state, etc.). A record of eating may include entries for the type of food eaten, the number of calories, the location in which the eating occurred, the feeling states associated with eating, and the consequences of eating (e.g., how the client felt afterward). In reviewing an eating diary with the clinician, a client can identify problematic eating patterns, such as eating when feeling bored or in response to TV food commercials, and devise better ways of handling these cues.

Today, clinicians are turning to the use of palmtop electronic devices, such as electronic diaries or personal digital assistants (PDAs) to help clients track specific behaviors. In one recent study, teenagers used palmtop devices to keep track of their smoking behavior and aggressive and depressive symptoms (Whalen et al., 2001).

Behavioral diaries can also help clients increase desirable but low-frequency behaviors, such as assertive behavior and dating behavior. Unassertive clients might track occasions that seem to warrant an assertive response and jot down their actual responses to each occasion. Clients and clinicians then review the log to highlight problematic situations and rehearse assertive responses. A client who is anxious about dating might record social contacts with the opposite gender. To measure the effects of treatment, clinicians may encourage clients to engage in a baseline period of self-monitoring before treatment is begun.

Self-monitoring, though, is not without its disadvantages. Some clients are unreliable and do not keep accurate records. They become forgetful or sloppy, or they underreport undesirable behaviors, such as overeating or smoking, because of embarrassment or fear of criticism. To offset these biases, clinicians may, with clients' consent, corroborate the accuracy of self-monitoring by gathering information from other parties, such as clients' spouses. (Achenbach et al., 2005). Private behaviors such as eating or smoking alone cannot be corroborated in this way, however. Sometimes other means of corroboration, such as physiological measures, are available. For example, blood alcohol levels can be used to verify self-reports of alcohol use, or analysis of carbon monoxide levels in clients' breath samples can be used to corroborate reports of abstinence from smoking.

Recording undesirable behaviors may make people more aware of the need to change them. Thus, self-monitoring can be put to therapeutic use if it leads to adaptive behavioral changes. In one weight-loss study, for example, the more consistently participants monitored what they ate, the more weight they lost (Baker & Kirschenbaum, 1993). This is not to imply that self-monitoring alone is sufficient to produce a desired behavior change. Motivation to change and skills needed to make behavior changes are also important.

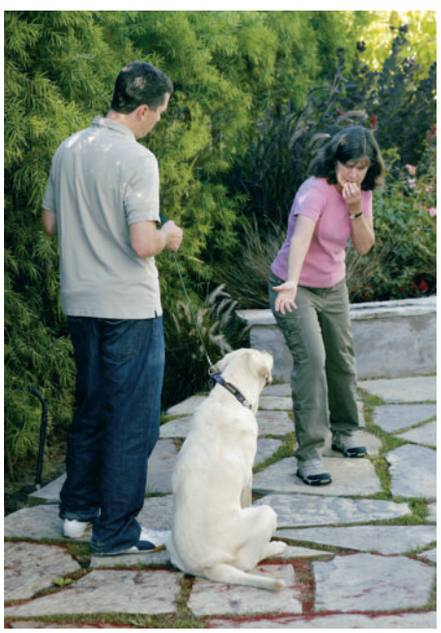
Analogue Measures *Analogue measures* are intended to simulate the setting in which the behavior naturally takes place but are carried out in laboratory or controlled settings. Role-playing exercises are common analogue measures. For example, suppose a client has difficulty challenging authority figures, such as professors. The clinician might describe a scene to the client as follows: "You've worked very hard on a term paper and received a very poor grade, say a D or an F. You approach the professor, who asks, 'Is there some problem?' What do you do now?" The client's enactment of the scene may reveal deficits in self-expression that can be addressed in therapy or assertiveness training.

The Behavioral Approach Task, or BAT, is a widely used analogue measure of a phobic person's approach to a feared object, such as a snake. Approach behavior is broken down into levels of response, such as looking in the direction of the snake from about 20 feet, touching the box holding the snake, and touching the snake. The BAT provides direct

TRUTH or FICTION

People in weight-loss programs who carefully monitor what they eat tend to lose less weight than people who are less-reliable monitors.

✓ **FALSE.** Investigators found that the more consistently weight-loss program participants monitored what they ate, the more weight they lost.



Behavioral approach task. One form of behavioral assessment of phobia involves measurement of the degree to which the person can approach or interact with the phobic stimulus. Here we see a woman with a dog phobia tentatively reaching out to pet a dog. Other people with snake phobias would not be able to touch the snake or even remain in its presence unless it was securely caged.

measurement of a response to a stimulus in a controlled situation. The subject's approach behavior can be quantified by assigning a score to each level of approach. In a recent treatment study of phobic children, the effectiveness of treatment was gauged in part by comparing the children's ability to approach the phobic stimulus (e.g., live animal, insect) after treatment with their performance before treatment (Öst et al., 2001).

Behavioral Rating Scales A *behavioral rating scale* is a checklist that provides information about the frequency, intensity, and range of problem behaviors. Behavioral rating scales differ from self-report personality inventories, in that items assess specific behaviors rather than personality characteristics, interests, or attitudes.

Behavioral rating scales are often used by parents to assess children's problem behaviors. The Child Behavior Checklist (CBCL) (Achenbach & Dumenci, 2001), for example, asks parents to rate their children on more than 100 specific problem behaviors, including the following:

- ❑ refuses to eat
- ❑ is disobedient
- ❑ hits
- ❑ is uncooperative
- ❑ destroys own things

The scale yields an overall problem-behavior score and subscale scores on dimensions such as delinquency, aggressiveness, and physical problems. The clinician can compare the child's score on these dimensions with norms based on samples of age-mates.

Cognitive Assessment

Cognitive assessment involves measurement of *cognitions*—thoughts, beliefs, and attitudes. Cognitive therapists believe that people who hold self-defeating or dysfunctional cognitions are at greater risk of developing emotional problems, such as depression, in the face of stressful or disappointing life experiences. They help clients replace dysfunctional thinking patterns with self-enhancing, rational thought patterns.

cognitive assessment Measurement of thoughts, beliefs, and attitudes that may be associated with emotional problems.

Several methods of cognitive assessment have been developed. One of the most straightforward is the thought record or diary. Depressed clients may carry such diaries to record dysfunctional thoughts as they arise. Aaron Beck (A. T. Beck et al., 1979) designed a thought diary or "Daily Record of Dysfunctional Thoughts" to help clients identify thought patterns connected with troubling emotional states. Each time the client experiences a negative emotion such as anger or sadness, entries are made to identify

1. The situation in which the emotional state occurred
2. The automatic or disruptive thoughts that passed through the client's mind
3. The type or category of disordered thinking that the automatic thought(s) represented (e.g., selective abstraction, overgeneralization, magnification, or absolutist thinking—see Chapter 2)
4. A rational response to the troublesome thought
5. The emotional outcome or final emotional response

A thought diary can become part of a treatment program in which the client learns to replace dysfunctional thoughts with rational alternative thoughts.

The Automatic Thoughts Questionnaire (ATQ-30; Hollon & Kendall, 1980) has clients rate the weekly frequency and degree of conviction associated with 30 automatic negative thoughts. (Automatic thoughts are thoughts that seem to just pop into our minds.) Sample items include the following:

- I don't think I can go on.
- I hate myself.
- I've let people down.

A total score is obtained by summing the frequencies of occurrence of each item. Higher scores are suggestive of depressive thought patterns. The 30-item ATQ has been statistically sorted into four categories or factors of related thoughts (see Table 3.9).

The ATQ successfully discriminates between depressed and nondepressed subjects, with higher scores indicative of more severe depressive symptoms (Blankstein & Segal, 2001). Recent evidence also suggests that in depressed patients who are treated with cognitive-behavioral therapy, reducing negative thinking as reflected in changes on the ATQ leads to reductions in depressive symptoms (Kaufman et al., 2005).

Another cognitive measure, the Dysfunctional Attitudes Scale (DAS; A. N. Weissman & Beck, 1978), consists of an inventory of a relatively stable set of underlying attitudes or assumptions associated with depression (Blankstein & Segal, 2001). Examples include, "I feel like I'm nothing if someone I love doesn't love me back." Subjects use a 7-point scale to rate the degree to which they endorse each belief. The DAS taps underlying assumptions believed to predispose individuals to depression, so it may be sensitive to detecting vulnerability to depression (DeRubeis, Tang, & Beck, 2001; Weich, Churchill, & Lewis, 2003).

Cognitive assessment opens a new domain to the psychologist in understanding how disruptive thoughts are related to abnormal behavior. Only in the past two decades or so have cognitive and cognitive-behavioral therapists begun to explore what B. F. Skinner labeled the "black box"—people's internal states—to learn how thoughts and attitudes influence emotional states and behavior.

The behavioral objection to cognitive techniques is that clinicians have no direct means of verifying clients' subjective experiences, their thoughts and beliefs. These are private experiences that can be reported but not observed and measured directly. However, even though thoughts remain private experiences, reports of cognitions in the form of rating scales or checklists can be quantified and validated by reference to external criteria.

TRUTH or FICTION

Despite advances in technology, physicians today must still perform surgery to study the workings of the brain.

✓ **FALSE.** Advances in brain-imaging techniques make it possible to observe the workings of the brain without invasive surgery.

physiological assessment Measurement of physiological responses that may be associated with abnormal behavior.

Physiological Measurement

Physiological assessment is the study of people's physiological responses. Anxiety, for example, is associated with arousal of the sympathetic division of the autonomic nervous system (see Chapter 2). Anxious people therefore show elevated heart rates and blood pressure, which can be measured directly by means of the pulse and a blood pressure cuff. People also sweat more heavily when they are anxious. When we sweat, our skin becomes wet, increasing its ability to conduct electricity. Sweating can be measured by means of the *electrodermal response* or galvanic skin response (*GSR*). (*Galvanic* is named after the Italian physicist and physician Luigi Galvani, who was a pioneer in research in electricity.) Measures of the GSR assess the amount of electricity that passes through two points on the skin, usually of the hand. We assume the person's anxiety level correlates with the amount of electricity conducted across the skin.

The *GSR* is just one example of a physiological response measured through probes or sensors connected to the body. Another example is the *electroencephalograph* (EEG), which measures brain waves by attaching electrodes to the scalp (Figure 3.6).

Changes in muscle tension are also often associated with states of anxiety or tension. They can be detected through the *electromyograph* (EMG), which monitors muscle tension through sensors attached to targeted muscle groups. Placement of EMG probes on the forehead can indicate muscle tension associated with tension headaches.

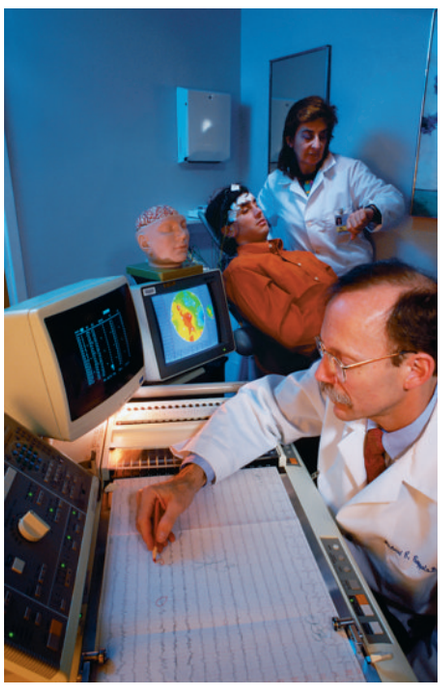


FIGURE 3.6 The electroencephalograph (EEG).
The EEG can be used to study differences in brain waves between groups of normal people and people with problems such as schizophrenia or organic brain damage.

Brain-Imaging and Recording Techniques Advances in medical technology have made it possible to study the workings of the brain without the need for surgery. One of the most common is the *electroencephalograph* (EEG), which is a record of the electrical activity of the brain. The EEG detects minute amounts of electrical activity in the brain, or *brain waves,* which are conducted between electrodes placed on the scalp. Certain brain wave patterns are associated with mental states such as relaxation and with the different stages of sleep. The EEG is used to examine brain wave

TABLE 3.9

Items Defining Factors on the Automatic Thoughts Questionnaire

Factor 1: Personal maladjustment and desire for change	Something has to change. What's the matter with me? I wish I were a better person. What's wrong with me? I'm so disappointed in myself.
Factor 2: Negative self-concept and negative expectations	My future is bleak. I'm a failure. I'll never make it. My life's not going the way I wanted it to. I'm a loser. Why can't I ever succeed? I'm no good.
Factor 3: Low self-esteem	I'm worthless. I hate myself.
Factor 4: Giving up/helplessness	I can't finish anything. It's just not worth it.

Source: Adapted from Hollon & Kendall (1980).

patterns associated with psychological disorders, such as schizophrenia, and with brain damage. The EEG is also used by medical personnel to reveal brain abnormalities such as tumors.

Brain-imaging techniques generate images that reflect the structure and functioning of the brain. In a *computed tomography* (CT) scan, a narrow X-ray beam is aimed at the head (Figure 3.7). The radiation that passes through is measured from multiple angles. The CT scan (also called CAT scan for *computerized axial tomography*) reveals abnormalities in shape and structure that may be suggestive of lesions, blood clots, or tumors. The computer enables scientists to integrate the measurements into a three-dimensional picture of the brain. Evidence of brain damage that was once detectable only by surgery may now be displayed on a monitor.

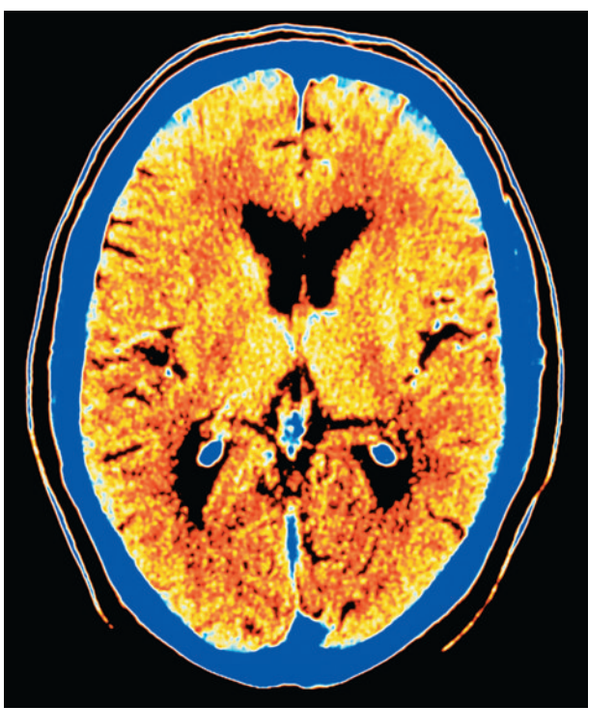


FIGURE 3.7 The computed tomography (CT) scan.
The CT scan aims a narrow X-ray beam at the head, and the resultant radiation is measured from multiple angles as it passes through. The computer enables researchers to consolidate the measurements into a three-dimensional image of the brain. The CT scan reveals structural abnormalities in the brain that may be implicated in various patterns of abnormal behavior.

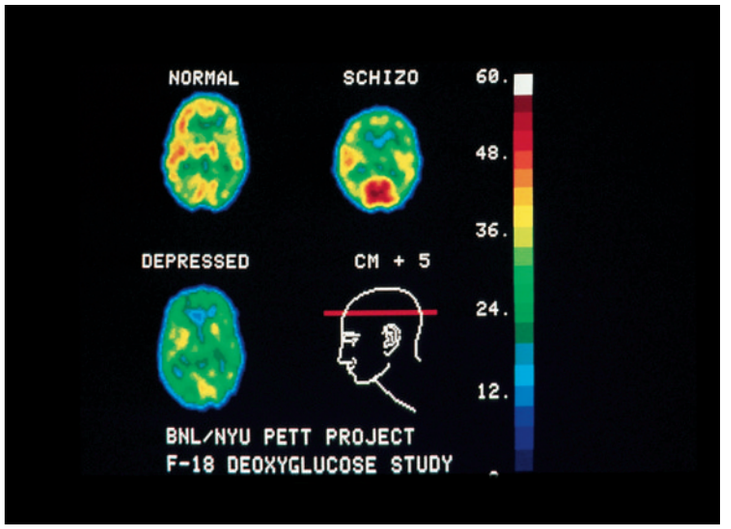


FIGURE 3.8 Positron emission tomography (PET) scan.
These PET scan images suggest differences in the metabolic processes of the brains of people with depression, schizophrenia, and controls who are free of psychological disorders.

Another imaging method, *positron emission tomography* (PET scan), is used to study the functioning of various parts of the brain (Figure 3.8). In this method, a small amount of a radioactive compound or tracer is mixed with glucose and injected into the bloodstream. When it reaches the brain, patterns of neural activity are revealed by measurement of the positrons—positively charged particles—emitted by the tracer. The glucose metabolized by parts of the brain generates a computer image of neural activity. Areas of greater activity metabolize more glucose. The PET scan has been used to learn which parts of the brain are most active (metabolize more glucose) when we are listening to music, solving a math problem, or using language. It can also be used to reveal abnormalities in brain activity in people with schizophrenia (see Chapter 12).

A third imaging technique is *magnetic resonance imaging* (MRI). In MRI, the person is placed in a donut-shaped tunnel that generates a strong magnetic field. The basic idea of the MRI, in the words of its inventor, is to stuff a human being into a large magnet (Weed, 2003). Radio waves of certain frequencies are then directed at the head. As a result, the brain emits signals that can be measured from several angles. As with the CT scan, the signals are integrated into a computer-generated image of the brain, which can reveal brain abnormalities associated with psychological disorders, such as schizophrenia and obsessive–compulsive disorder.

A new type of MRI, called *functional magnetic resonance imaging* (fMRI), is used to identify parts of the brain that become active when people engage in particular tasks,

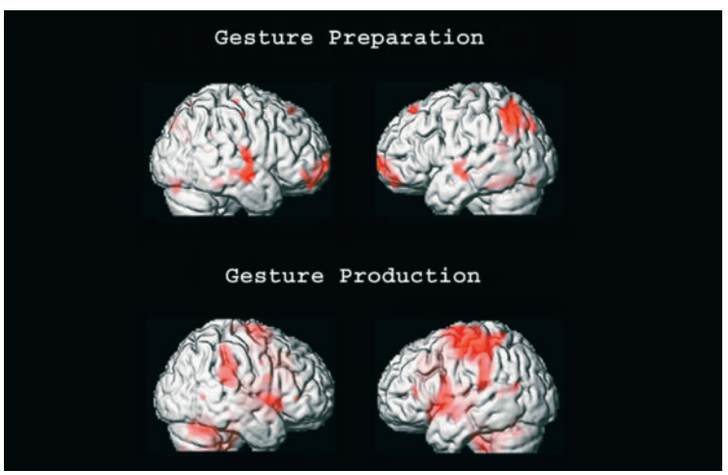


FIGURE 3.9 Functional magnetic resonance imaging (fMRI). A fMRI is a specialized type of MRI that allows investigators to determine the parts of the brain that are activated during particular tasks. The areas depicted in red become activated when a person thinks about performing certain gestures (top), such as using a hammer or writing with a pen, and when the person actually performs these gestures (bottom). The right hemisphere is shown on the left side of the photographs, and the left hemisphere is shown on the right side.

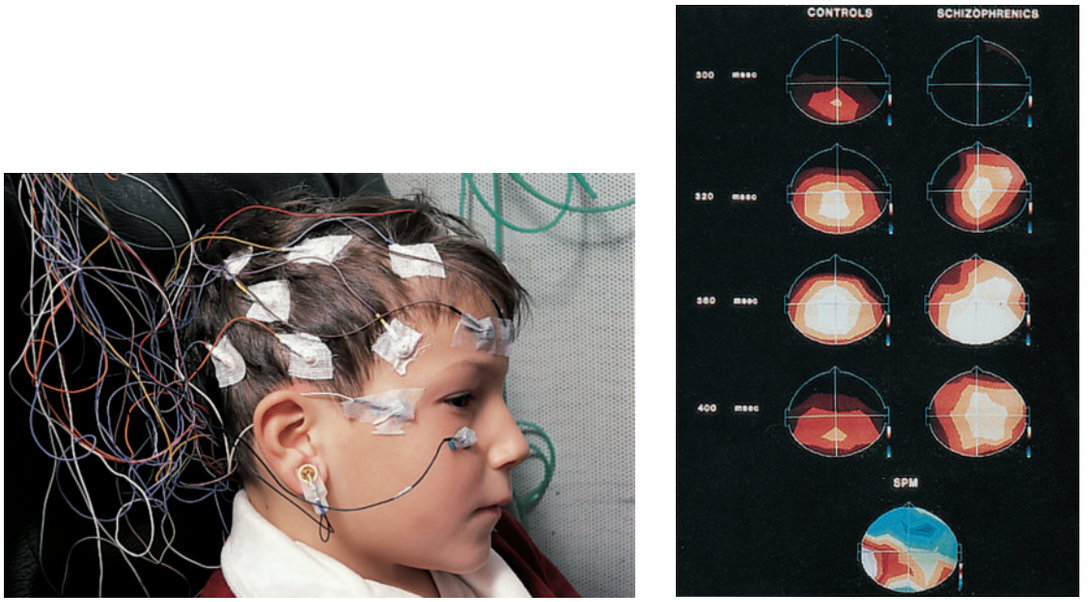


FIGURE 3.10 Brain electrical activity mapping (BEAM).
BEAM is a type of EEG in which electrodes are attached to the scalp (left) to measure electrical activity in various regions of the brain. The left column of the brain scans (right) shows the average level of electrical activity in the brains of 10 normal people ("controls") at 4 time intervals. The column to the right shows the average level of activity of subjects with schizophrenia during the same intervals. Higher activity levels are represented in increasing order by yellows, reds, and whites. The computer-generated image in the bottom center summarizes differences in activity levels between the brains of normal subjects and those with schizophrenia. Areas of the brain depicted in blue show small differences between the groups. White areas represent larger differences.

such as vision, memory, or use of speech (see Figure 3.9). In an illustrative example of an fMRI study, investigators found that that when cocaine-addicted subjects experienced cocaine cravings, their brains showed increased activity in the same areas that were engaged when healthy subjects watched depressing videotapes (Wexler et al., 2001). This suggests there may be a physiological link between depressive feelings and drug cravings.

Brain electrical activity mapping (BEAM), a sophisticated type of EEG, uses the computer to analyze brain wave patterns and reveal areas of relative activity and inactivity from moment to moment (Figure 3.10) (F. H. Duffy, 1994; Silberstein et al., 1998). Twenty or more electrodes are attached to the scalp and simultaneously feed information about brain activity to a computer. The computer analyzes the signals and displays the pattern of brain activity on a color monitor, providing a vivid image of the electrical activity of the brain at work. BEAM and other similar techniques have been helpful in studying the brain activity of people with schizophrenia and children with attention-deficit hyperactivity disorder, among other physical and psychological disorders. In later chapters we see how modern imaging techniques are furthering our understanding of various patterns of abnormal behavior.

TRUTH or FICTION

Cocaine cravings in people addicted to cocaine have been linked to parts of the brain that are normally activated during pleasant emotions.

FALSE. Just the opposite was the case. Cravings were associated with activation of parts of the brain that normally become active when watching depressing videotapes.

SOCIOCULTURAL AND ETHNIC FACTORS IN ASSESSMENT

Researchers and clinicians must keep sociocultural and ethnic factors in mind when assessing personality traits and psychological disorders. When testing people from other cultures, careful translations are essential to capture the meanings of the original items (Butcher et al., 2002, 2003). However, assessment techniques that are reliable and valid within one culture may not be so in another, even when they are translated accurately (Bolton, 2001; Cheung et al., 2003).

For example, the Chinese version of the Beck Depression Inventory (BDI), a widely used inventory of depression in the United States, has shown good validity in distinguishing people with depression from people without depression (Chan, 1991;

Yeung et al., 2002). However, other investigators found that Chinese people in both Hong Kong and the People's Republic of China showed high levels of disturbed behavior when tested with a Chinese version of the MMPI (Cheung, Song, & Butcher, 1991). However, more careful analysis suggests that their test responses reflected cultural differences rather than greater psychopathology (Cheung, 1991; Cheung & Ho, 1997). In other words, researchers need to disentangle psychopathology from sociocultural factors. Translations of assessment instruments should not only translate words, but also provide instructions that encourage examiners to address the importance of cultural beliefs, norms, and values, so diagnosticians and interviewers will consider the client's background when making assessments of abnormal behavior patterns.

Studies in our own culture have put psychological instruments such as the BDI and MMPI-2 under a cultural microscope. Recently, investigators found that the BDI, now in a second edition called the BDI-II, works well in assessing depressive symptoms of African American medical patients (Grothe et al., 2005). Other investigators find no evidence of clinically significant cultural bias on the MMPI-2 in comparing groups of African American and European American (non-Hispanic White) patients in either outpatient or inpatient settings (Arbisi, Ben-Porath, & McNulty, 2002; McNulty et al., 1997). In yet other research, investigators found that the MMPI-2 was sensitive to detecting problem behaviors and symptoms in American Indian tribal members (Greene et al., 2003; Robin et al., 2003).

Interviewers must also recognize the importance of taking language preferences into account when conducting multicultural assessments. Meanings can get lost in translation, or worse, distorted. For example, Spanish-speakers are often judged to be more disturbed when interviewed in English than in Spanish (Fabrega, 1990). Interviewers, too, may fail to appreciate the idioms and subtleties of different languages. For instance, we recall one clinician, a foreign-born and -trained psychiatrist whose native language was not English, reporting that a patient had exhibited the delusional belief that he was outside his body. The interviewer based this assessment on the patient's response when asked if he was feeling anxious. "Yes, Doc," the patient replied, "I feel like I'm jumping out of my skin at times."

In conclusion, people's psychological problems, which are no less complex than people themselves, are assessed in many ways. Clients are asked to explain their problems as best they can; sometimes a computer does the asking. Psychologists can draw on batteries of tests that assess intelligence, personality, and neuropsychological integrity. Many psychologists prefer to observe people's behavior directly. Modern technology has provided several means of studying the structure and function of the brain. The methods of assessment clinicians select reflect the problems of their clients, their theoretical orientations, and their mastery of specialized technologies.

SUMMING UP

How Are Abnormal Behavior Patterns Classified?

What is the DSM and what are its major features? The *Diagnostic and Statistical Manual of Mental Disorders (DSM)* is the most widely accepted system for classifying mental disorders. The *DSM* uses specific diagnostic criteria to group patterns of abnormal behaviors that share common clinical features and a multiaxial system of evaluation.

Why is the DSM considered a multiaxial system? The *DSM* system consists of five axes of classification: Axis I (Clinical Disorders), Axis II (Personality Disorders and Mental Retardation), Axis III (General Medical Conditions), Axis IV (Psychosocial and Environmental Problems), and Axis V (Global Assessment of Functioning).

What are the major strengths and weaknesses of the DSM? Strengths of the *DSM* include its use of specified diagnostic criteria and a multiaxial system to provide a comprehensive picture of the person's functioning. Weaknesses include questions about reliability and validity of certain diagnostic categories and, to some, the adoption of a medical model framework for classifying abnormal behavior patterns.

Standards of Assessment

What are the standards by which methods of assessment are judged? Methods of assessment must be reliable and valid. Reliability of assessment techniques is shown in various ways, including internal consistency, test–retest reliability, and inter-

rater reliability. Validity is measured by means of content validity, criterion validity, and construct validity.

Methods of Assessment

What is a clinical interview? A clinical interview involves the use of a set of questions designed to elicit relevant information from people seeking treatment.

What are the three major types of clinical interviews? The three major types of clinical interviews are unstructured interviews (clinicians use their own style of questioning rather than follow a particular script), semistructured interviews (clinicians follow a general outline in directing their questioning but are free to branch off in other directions), and structured interviews (clinicians strictly follow a preset order of questions).

What are psychological tests? Psychological tests are structured methods of assessment used to evaluate reasonably stable traits such as intelligence and personality.

What are the major types of psychological tests? Tests of intelligence, such as the Wechsler scales, are used for various purposes in clinical assessment, including determining evidence of mental retardation or cognitive impairment, and assessing strengths and weaknesses. Objective personality tests, such as the MMPI, use structured items to measure psychological characteristics or traits, such as anxiety, depression, and masculinity-femininity. These tests are considered objective in the sense that they make use of a limited range of possible responses to items and are based on an empirical, or objective, method of test construction. Projective personality tests, such as the Rorschach and TAT, require subjects to interpret ambiguous stimuli in the belief their answers may shed light on their unconscious processes.

What is neuropsychological assessment? Neuropsychological assessment involves the use of psychological tests to indicate possible neurological impairment or brain defects. The Halstead-Reitan Neuropsychological Battery uncovers skill deficits that are suggestive of underlying brain damage.

What are some of the methods used in behavioral assessment? In behavioral assessment, test responses are taken as samples of behavior rather than as signs of underlying traits or dispositions. The behavioral examiner may conduct a functional analysis, which relates the problem behavior to its antecedents and consequents. Methods of behavioral assessment include behavioral interviewing, self-monitoring, use of analogue or contrived measures, direct observation, and behavioral rating scales.

What is cognitive assessment? Cognitive assessment focuses on the measurement of thoughts, beliefs, and attitudes in order to help identify distorted thinking patterns. Specific methods of assessment include the use of a thought record or diary and the use of rating scales such as the Automatic Thoughts Questionnaire (ATQ) and the Dysfunctional Attitudes Scale (DAS).

How do clinicians and researchers study physiological functioning? Measures of physiological functioning include heart rate, blood pressure, galvanic skin response (GSR), muscle tension, and brain wave activity. Brain-imaging and recording techniques such as EEG, CT scans, PET scans, MRI, and BEAM probe the inner workings and structures of the brain.

Sociocultural and Ethnic Factors in Assessment

Why is it important to take cultural or ethnic factors into account in psychological assessment? We need to ensure that tests that are validated in one culture are reliable and valid when used with members of another culture.

KEY TERMS

culture-bound syndromes *(p. 73)*
reliability *(p. 75)*
validity *(p. 75)*
sanism *(p. 77)*
content validity *(p. 79)*
criterion validity *(p. 79)*
construct validity *(p. 79)*
unstructured interview *(p. 81)*
semistructured interview *(p. 81)*
structured interview *(p. 81)*
objective tests *(p. 84)*
projective tests *(p. 87)*
reality testing *(p. 88)*
neuropsychological assessment *(p. 90)*
behavioral assessment *(p. 92)*
self-monitoring *(p. 93)*
cognitive assessment *(p. 95)*
physiological assessment *(p. 96)*

MEDIA TOOLS

A variety of digital and online learning tools are avaiable to enrich your learning experience and help you succeed in the course. These resources include:

- **MyPsychLab,** an online learning system for your course in abnormal psychology that allows you to test your mastery of concepts in the book by using chapter-by-chapter diagnostic tests. Results from the diagnostic tests help you build a customized study plan. To access **MyPsychLab,** visit www.prenhall.com/mypsychlab and follow the instructions on the site.
- **"SPEAKING OUT" PATIENT INTERVIEWS,** a set of video case examples of actual patients you can access on the companion CD-ROM included with the text. Icons in the margins of the chapter highlight the video case examples included on the CD-ROM.
- **COMPANION WEB SITE,** an online study center that offers computer-scored quizzes you can use to test your knowledge, along with other study tools and links to related sites to enhance your learning of abnormal psychology. To access the companion web site, visit www.prenhall.com/nevid and use the various tabs and links on the site to access these learning resources.