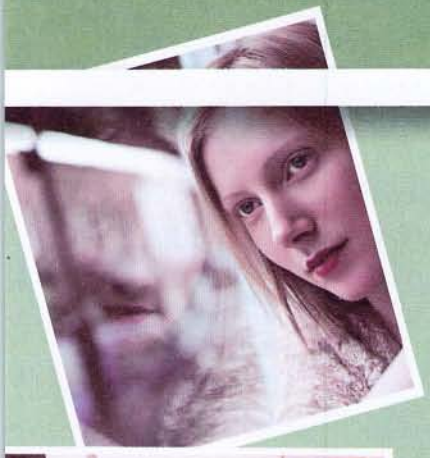
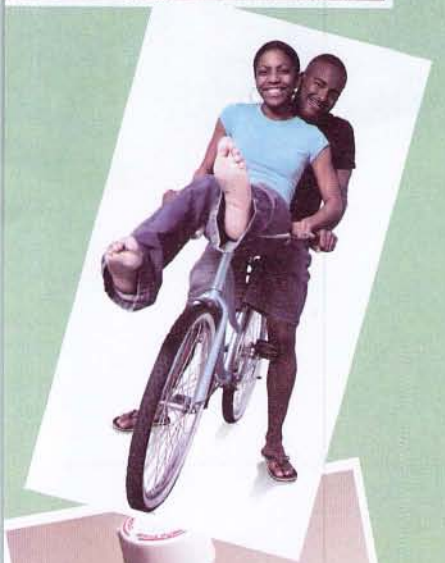
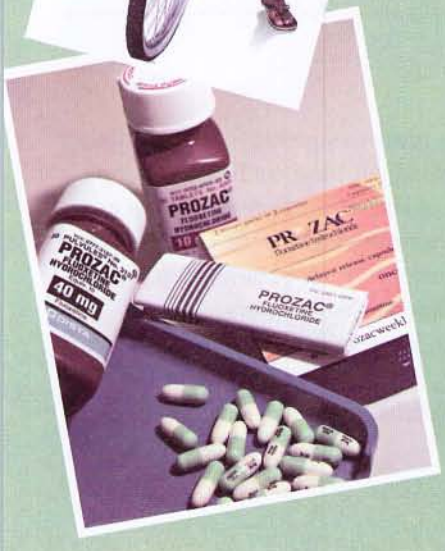
Unit XIII







Treatment of Abnormal Behavior

Modules

Kay Redfield Jamison, an award-winning clinical psychologist and world expert on the emotional extremes of bipolar disorder, knows her subject firsthand. "For as long as I can remember," she recalled in *An Unquiet Mind,* "I was frighteningly, although often wonderfully, beholden to moods. Intensely emotional as a child, mercurial as a young girl, first severely depressed as an adolescent, and then unrelentingly caught up in the cycles of manic-depressive illness [now known as bipolar disorder] by the time I began my professional life, I became, both by necessity and intellectual inclination, a student of moods" (1995, pp. 4–5). Her life was blessed with times of intense sensitivity and passionate energy. But like her father's, it was also at times plagued by reckless spending, racing conversation, and sleeplessness, alternating with swings into "the blackest caves of the mind."

Then, "in the midst of utter confusion," she made a sane and profoundly helpful decision. Risking professional embarrassment she made an appointment with a therapist, a psychiatrist she would visit weekly for years to come.

> He kept me alive a thousand times over. He saw me through madness, despair, wonderful and terrible love affairs, disillusionments and triumphs, recurrences of illness, an almost fatal suicide attempt, the death of a man I greatly loved, and the enormous pleasures and aggravations of my professional life. . . . He was very tough, as well

> as very kind, and even though he understood more than anyone how much I felt I was losing—in energy, vivacity, and originality—by taking medication, he never was seduced into losing sight of the overall perspective of how costly, damaging, and life threatening my illness was. . . . Although I went to him to be treated for an illness, he taught me . . . the total beholdenness of brain to mind and mind to brain (pp. 87–88).

"Psychotherapy heals," Jamison reports. "It makes some sense of the confusion, reins in the terrifying thoughts and feelings, returns some control and hope and possibility from it all."

Module 70

Introduction to Therapy, and Psychodynamic and Humanistic Therapies

Image Source RF/Sydney Bourne/Getty Images

Module Learning Objectives

70-1 Discuss how *psychotherapy, biomedical therapy,* and an *eclectic approach* to therapy differ.

70-2 Discuss the goals and techniques of psychoanalysis, and describe how they have been adapted in psychodynamic therapy.

70-3 Identify the basic themes of humanistic therapy, and describe the specific goals and techniques of Rogers' client-centered approach.

The long history of efforts to treat psychological disorders has included a bewildering mix of harsh and gentle methods. Well-meaning individuals have cut holes in people's heads and restrained, bled, or "beat the devil" out of them. But they also have given warm baths and massages and placed people in sunny, serene environments. They have administered drugs and electric shocks. And they have talked with their patients about childhood experiences, current feelings, and maladaptive thoughts and behaviors.

Reformers Philippe Pinel and Dorothea Dix pushed for gentler, more humane treatments and for constructing mental hospitals. Since the 1950s, the introduction of effective drug therapies and community-based treatment programs have emptied most of those hospitals.

Introduction to Therapy

70-1 How do *psychotherapy, biomedical therapy,* and an *eclectic approach* to therapy differ?

Today's therapies can be classified into two main categories. In **psychotherapy,** a trained therapist uses psychological techniques to assist someone seeking to overcome difficulties or achieve personal growth. **Biomedical therapy** offers medication or other biological treatments.

Many therapists combine techniques. Jamison received psychotherapy in her meetings with her psychiatrist, and she took medications to control her wild mood swings. Many psychotherapists describe themselves as taking an **eclectic approach,** using a blend of psychotherapies. Like Jamison, many patients also can receive psychotherapy combined with medication.

Let's look first at the psychotherapeutic "talk therapies." Among the dozens of types of psychotherapy, we will look at the most influential. Each is built on one or more of psychology's major theories: psychodynamic, humanistic, behavioral, and cognitive. Most of these techniques can be used one-on-one or in groups. We'll explore psychodynamic and humanistic therapies in this module, and behavior, cognitive, and group therapies in Module 71.

AP® Exam Tip

Most of the treatments discussed in this unit come from the perspectives you've been learning about since Unit I. As you reach each major section—like the upcoming one on psychoanalytic and psychodynamic therapy—try to anticipate how someone from that perspective would approach therapy (for example, "What would Freud do?"). This should help you organize and retain the information as you read.

The history of treatment Visitors to eighteenth-century mental hospitals paid to gawk at patients, as though they were viewing zoo animals. William Hogarth's (1697–1764) painting captured one of these visits to London's St. Mary of Bethlehem hospital (commonly called Bedlam).

psychotherapy treatment involving psychological techniques; consists of interactions between a trained therapist and someone seeking to overcome psychological difficulties or achieve personal growth.

biomedical therapy prescribed medications or procedures that act directly on the person's physiology.

eclectic approach an approach to psychotherapy that, depending on the client's problems, uses techniques from various forms of therapy.

psychoanalysis Sigmund Freud's therapeutic technique. Freud believed the patient's free associations, resistances, dreams, and transferences—and the therapist's interpretations of them—released previously repressed feelings, allowing the patient to gain self-insight.

Psychoanalysis and Psychodynamic Therapy

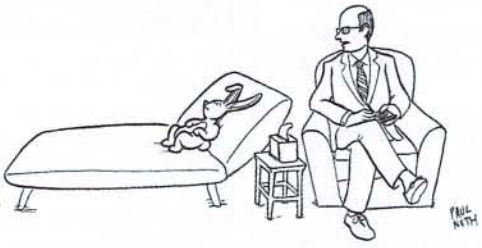
70-2 What are the goals and techniques of psychoanalysis, and how have they been adapted in psychodynamic therapy?

Sigmund Freud's **psychoanalysis** was the first of the psychological therapies. Few clinicians today practice therapy as Freud did, but his work deserves discussion as part of the foundation for treating psychological disorders.

Goals

Psychoanalytic theory presumes that healthier, less anxious living becomes possible when people release the energy they had previously devoted to id-ego-superego conflicts (see Module 55). Freud assumed that we do not fully know ourselves. There are threatening things that we seem to want not to know—that we disavow or deny. "We can have loving feelings and hateful feelings toward the same person," notes Jonathan Shedler (2009), and "we can desire something and also fear it."

Freud's therapy aimed to bring patients' repressed or disowned feelings into conscious awareness. By helping them reclaim their unconscious thoughts and feelings and giving them *insight* into the origins of their disorders, he aimed to help them reduce growth-impeding inner conflicts.



"I'm more interested in hearing about the eggs you're hiding from yourself."

Techniques

Psychoanalysis is historical reconstruction. Psychoanalytic theory emphasizes the formative power of childhood experiences and their ability to mold the adult. Thus, it aims to unearth one's past in hope of unmasking the present. After discarding hypnosis as an unreliable excavator, Freud turned to *free association*.

Imagine yourself as a patient using free association. First, you relax, perhaps by lying on a couch. As the psychoanalyst sits out of your line of vision, you say aloud whatever comes to mind. At one moment, you're relating a childhood memory. At another, you're describing a dream or recent experience. It sounds easy, but soon you notice how often you edit your thoughts as you speak. You pause for a second before uttering an embarrassing thought. You omit what seems trivial, irrelevant, or shameful. Sometimes your mind goes blank or you find yourself unable to remember important details. You may joke or change the subject to something less threatening.

To the analyst, these mental blocks indicate **resistance.** They hint that anxiety lurks and you are defending against sensitive material. The analyst will note your resistances and then provide insight into their meaning. If offered at the right moment, this **interpretation**—of, say, your not wanting to talk about your mother—may illuminate the underlying wishes, feelings, and conflicts you are avoiding. The analyst may also offer an explanation of how this resistance fits with other pieces of your psychological puzzle, including those based on analysis of your dream content.

Over many such sessions, your relationship patterns surface in your interaction with your therapist. You may find yourself experiencing strong positive or negative feelings for your analyst. The analyst may suggest you are **transferring** feelings, such as dependency or mingled love and anger, that you experienced in earlier relationships with family members or other important people. By exposing such feelings, you may gain insight into your current relationships.

Relatively few U.S. therapists now offer traditional psychoanalysis. Much of its underlying theory is not supported by scientific research (Module 56). Analysts' interpretations cannot be proven or disproven. And psychoanalysis takes considerable time and money, often years of several sessions per week. Some of these problems have been addressed in the modern psychodynamic perspective that has evolved from psychoanalysis.

AP® Exam Tip

Psychoanalytic treatment is the public image of psychology. If you were to ask people to sketch a psychologist at work, you would see lots of sketches of therapists taking notes while they were seated behind patients on couches. Keep in mind that most modern therapy is very different from this image, and psychology careers stretch well beyond therapy.

"I haven't seen my analyst in 200 years. He was a strict Freudian. If I'd been going all this time, I'd probably almost be cured by now." -Woody Allen, after awakening from suspended animation in the movie *Sleeper*

resistance in psychoanalysis, the blocking from consciousness of anxiety-laden material.

interpretation in psychoanalysis, the analyst's noting supposed dream meanings, resistances, and other significant behaviors and events in order to promote insight.

transference in psychoanalysis, the patient's transfer to the analyst of emotions linked with other relationships (such as love or hatred for a parent).

psychodynamic therapy therapy deriving from the psychoanalytic tradition that views individuals as responding to unconscious forces and childhood experiences, and that seeks to enhance self-insight.

Psychodynamic Therapy

Therapists who use **psychodynamic therapy** techniques don't talk much about id, ego, and superego. Instead they try to help people understand their current symptoms. They focus on themes across important relationships, including childhood experiences and the therapist relationship. Rather than lying on a couch, out of the therapist's line of vision, patients meet with their therapist face to face. These meetings take place once or twice a week (rather than several times per week), and often for only a few weeks or months (rather than several years).

In these meetings, patients explore and gain perspective into defended-against thoughts and feelings. Therapist David Shapiro (1999, p. 8) illustrates with the case of a young man who had told women that he loved them, when knowing well that he didn't. They expected it, so he said it. But later with his wife, who wishes he would say that he loves her, he finds he "cannot" do that—"I don't know why, but I can't."

Therapist: Do you mean, then, that if you could, you would like to?

Patient: Well, I don't know. . . . Maybe I can't say it because I'm not sure it's true. Maybe I don't love her.

Further interactions reveal that he can't express real love because it would feel "mushy" and "soft" and therefore unmanly. He is "in conflict with himself, and he is cut off from the nature of that conflict." Shapiro noted that with such patients, who are estranged from themselves, therapists using psychodynamic techniques "are in a position to introduce them to themselves. We can restore their awareness of their own wishes and feelings, and their awareness, as well, of their reactions against those wishes and feelings."

Psychodynamic therapies may also help reveal past relationship troubles as the origin of current difficulties. Jonathan Shedler (2010a) recalls his patient Jeffrey's complaints of difficulty getting along with his colleagues and wife, who saw him as hypercritical. Jeffrey then "began responding to me as if I were an unpredictable, angry adversary." Shedler seized this opportunity to help Jeffrey recognize the relationship pattern, and its roots in the attacks and humiliation he experienced from his alcohol-abusing father—and to work through and let go of this defensive responding to people.

Interpersonal psychotherapy, a brief (12- to 16-session) variation of psychodynamic therapy, has effectively treated depression (Cuijpers, 2011). Although interpersonal psychotherapy aims to help people gain insight into the roots of their difficulties, its goal is symptom relief in the here and now. Rather than focusing mostly on undoing past hurts and offering interpretations, the therapist concentrates primarily on current relationships and on helping people improve their relationship skills.

The case of Anna, a 34-year-old married professional, illustrates these goals. Five months after receiving a promotion, with accompanying increased responsibilities and longer hours, Anna experienced tensions with her husband over his wish for a second child. She began feeling depressed, had trouble sleeping, became irritable, and was gaining weight. A therapist using psychodynamic techniques might have helped Anna gain insight into her angry impulses and her defenses against anger. A therapist applying interpersonal techniques would concur but would also engage her thinking on more immediate issues—how she could balance work and home, resolve the dispute with her husband, and express her emotions more effectively (Markowitz et al., 1998).

Véronique Burger/Science Source

Face-to-face therapy
In contemporary psychodynamic therapy, the couch has disappeared. But the influence of psychoanalytic theory continues in some areas, as the therapist seeks information from the patient's childhood and helps the person bring unconscious feelings into conscious awareness.

Humanistic Therapies

70-3 What are the basic themes of humanistic therapy? What are the specific goals and techniques of Rogers' client-centered approach?

The humanistic perspective (Module 57) has emphasized people's inherent potential for self-fulfillment. Like psychodynamic therapies, humanistic therapies have attempted to reduce growth-impeding inner conflicts by providing clients with new insights. Indeed, the psychodynamic and humanistic therapies are often referred to as **insight therapies.** But humanistic therapy differs from psychoanalytic therapy in many other ways:

insight therapies a variety of therapies that aim to improve psychological functioning by increasing a person's awareness of underlying motives and defenses.

- *Humanistic therapy aims to boost people's self-fulfillment by helping them grow in self-awareness and self-acceptance.*
- *Promoting this growth, not curing illness, is the focus of therapy.* Thus, those in therapy became "clients" or just "persons" rather than "patients" (a change many other therapists have adopted).
- *The path to growth is taking immediate responsibility for one's feelings and actions, rather than uncovering hidden determinants.*
- *Conscious thoughts are more important than the unconscious.*
- *The present and future are more important than the past.* The goal is to explore feelings as they occur, rather than achieve insights into the childhood origins of the feelings.

Carl Rogers (1902–1987) developed the widely used humanistic technique he called **client-centered therapy,** which focuses on the person's conscious self-perceptions. In this *nondirective therapy,* the therapist listens, without judging or interpreting, and seeks to refrain from directing the client toward certain insights.

AP® Exam Tip

You can remember *A*cceptance, *G*enuineness, and *E*mpathy as "AGE."

Believing that most people possess the resources for growth, Rogers (1961, 1980) encouraged therapists to exhibit *acceptance, genuineness,* and *empathy.* When therapists enable their clients to feel unconditionally accepted, when they drop their façades and genuinely express their true feelings, and when they empathically sense and reflect their clients' feelings, the clients may deepen their self-understanding and self-acceptance (Hill & Nakayama, 2000). As Rogers (1980, p. 10) explained,

> Hearing has consequences. When I truly hear a person and the meanings that are important to him at that moment, hearing not simply his words, but him, and when I let him know that I have heard his own private personal meanings, many things happen. There is first of all a grateful look. He feels released. He wants to tell me more about his world. He surges forth in a new sense of freedom. He becomes more open to the process of change.
>
> I have often noticed that the more deeply I hear the meanings of the person, the more there is that happens. Almost always, when a person realizes he has been deeply heard, his eyes moisten. I think in some real sense he is weeping for joy. It is as though he were saying, "Thank God, somebody heard me. Someone knows what it's like to be me."

"We have two ears and one mouth that we may listen the more and talk the less." -Zeno, 335–263 B.C.E., *Diogenes Laertius*

"Hearing" refers to Rogers' technique of **active listening**—echoing, restating, and seeking clarification of what the person expresses (verbally or nonverbally) and acknowledging the expressed feelings. Active listening is now an accepted part of therapeutic counseling practices in many high schools, colleges, and clinics. The counselor listens attentively and interrupts only to restate and confirm feelings, to accept what is being expressed, or to seek clarification. The following brief excerpt between Rogers and a male client illustrates how he sought to provide a psychological mirror that would help clients see themselves more clearly.

> **Rogers:** Feeling that now, hm? That you're just no good to yourself, no good to anybody. Never will be any good to anybody. Just that you're completely worthless, huh?—Those really are lousy feelings. Just feel that you're no good at all, hm?
>
> **Client:** Yeah. *(Muttering in low, discouraged voice)* That's what this guy I went to town with just the other day told me.
>
> **Rogers:** This guy that you went to town with really told you that you were no good? Is that what you're saying? Did I get that right?
>
> **Client:** M-hm.
>
> **Rogers:** I guess the meaning of that if I get it right is that here's somebody that—meant something to you and what does he think of you? Why, he's told you that he thinks you're no good at all. And that just really knocks the props out from under you. *(Client weeps quietly.)* It just brings the tears. *(Silence of 20 seconds)*
>
> **Client:** *(Rather defiantly)* I don't care though.
>
> **Rogers:** You tell yourself you don't care at all, but somehow I guess some part of you cares because some part of you weeps over it.
>
> *(Meador & Rogers, 1984, p. 167)*

client-centered therapy a humanistic therapy, developed by Carl Rogers, in which the therapist uses techniques such as active listening within a genuine, accepting, empathic environment to facilitate clients' growth. (Also called *person-centered therapy.*)

active listening empathic listening in which the listener echoes, restates, and clarifies. A feature of Rogers' client-centered therapy.

unconditional positive regard a caring, accepting, nonjudgmental attitude, which Carl Rogers believed would help clients to develop self-awareness and self-acceptance.

Can a therapist be a perfect mirror, without selecting and interpreting what is reflected? Rogers conceded that one cannot be *totally* nondirective. Nevertheless, he believed that the therapist's most important contribution is to accept and understand the client. Given a nonjudgmental, grace-filled environment that provides **unconditional positive regard,** people may accept even their worst traits and feel valued and whole.

Active listening Carl Rogers (right) empathized with a client during this group therapy session.

If you want to listen more actively in your own relationships, three Rogerian hints may help:

1. ***Paraphrase.*** Rather than saying "I know how you feel," check your understanding by summarizing the person's words in your own words.
2. ***Invite clarification.*** "What might be an example of that?" may encourage the person to say more.
3. ***Reflect feelings.*** "It sounds frustrating" might mirror what you're sensing from the person's body language and intensity.

Before You Move On

► ASK YOURSELF

Think of your closest friends. Do they tend to express more empathy than those you don't feel as close to? How have your own active listening skills changed as you've gotten older?

► TEST YOURSELF

In psychoanalysis, what does it mean when we refer to transference, resistance, and interpretation?

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

Module 70 Review

70-1 How do *psychotherapy, biomedical therapy,* and an *eclectic approach* to therapy differ?

- *Psychotherapy* is treatment involving psychological techniques; it consists of interactions between a trained therapist and someone seeking to overcome psychological difficulties or achieve personal growth.
- The major psychotherapies derive from psychology's psychodynamic, humanistic, behavioral, and cognitive perspectives.
- *Biomedical therapy* treats psychological disorders with medications or procedures that act directly on a patient's physiology.
- An *eclectic approach* combines techniques from various forms of psychotherapy.

70-2 What are the goals and techniques of psychoanalysis, and how have they been adapted in psychodynamic therapy?

- Through *psychoanalysis,* Sigmund Freud tried to give people self-insight and relief from their disorders by bringing anxiety-laden feelings and thoughts into conscious awareness.
  - Techniques included using free association and *interpretation* of instances of *resistance* and *transference.*
- Contemporary *psychodynamic therapy* has been influenced by traditional psychoanalysis but is briefer, less expensive, and more focused on helping the client find relief from current symptoms.
  - Therapists help clients understand themes that run through past and current relationships.
  - Interpersonal therapy is a brief 12- to 16-session form of psychodynamic therapy that has been effective in treating depression.

70-3 What are the basic themes of humanistic therapy, and what are the specific goals and techniques of Rogers' client-centered approach?

- Both psychoanalytic and humanistic therapies are *insight therapies*—they attempt to improve functioning by increasing clients' awareness of motives and defenses.
- Humanistic therapy's goals have included helping clients grow in self-awareness and self-acceptance; promoting personal growth rather than curing illness; helping clients take responsibility for their own growth; focusing on conscious thoughts rather than unconscious motivations; and seeing the present and future as more important than the past.
- Carl Rogers' *client-centered therapy* proposed that therapists' most important contributions are to function as a psychological mirror through *active listening* and to provide a growth-fostering environment of *unconditional positive regard,* characterized by genuineness, acceptance, and empathy.

Multiple-Choice Questions

1. Many clinical psychologists incorporate a variety of approaches into their therapy. They are said to take a(n) _____ approach.

a. transference
b. biomedical
c. psychoanalytic
d. eclectic
e. psychodynamic

2. What do psychodynamic therapists call the blocking of anxiety-laden material from the conscious?

a. Resistance
b. Interpretation
c. Transference
d. Face-to-face therapy
e. Interpersonal psychotherapy

3. Which of the following is one of the ways humanistic therapies differ from psychoanalytic therapies?

a. Humanist therapies believe the past is more important than the present and future.
b. Humanist therapies boost self-fulfillment by decreasing self-acceptance.
c. Humanist therapies believe the path to growth is found by uncovering hidden determinants.
d. Humanist therapies believe that unconscious thoughts are more important than conscious thoughts.
e. Humanist therapies focus on promoting growth, not curing illness.

4. Which of the following is a feature of client-centered therapy?

a. Free association
b. Active listening
c. Resistance
d. Freudian interpretation
e. Medical/biological treatment

Practice FRQs

1. Explain what psychoanalysis is, and then discuss the relationship of transference and resistance to the therapy.

Answer

1 point: Psychoanalysis is a Freudian therapy that seeks to get patients to release repressed feelings to gain self-insight.

1 point: Transference is the patient's transfer of emotion to the analyst.

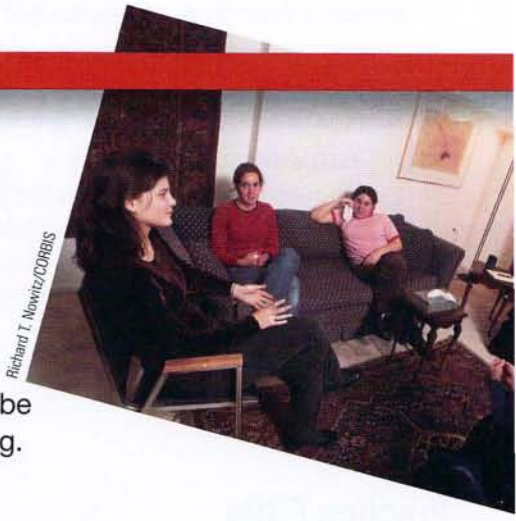
1 point: Resistance is the blocking of consciousness (by the patient) of anxiety-laden material.

2. Explain what client-centered therapy is, then describe the two major techniques of the therapy.

(3 points)

Module 71

Behavior, Cognitive, and Group Therapies


Richard T. Nowitz/CORBIS

Module Learning Objectives

71-1 Explain how the basic assumption of behavior therapy differs from those of psychodynamic and humanistic therapies, and describe the techniques used in exposure therapies and aversive conditioning.

71-2 State the main premise of therapy based on operant conditioning principles, and describe the views of its proponents and critics.

71-3 Discuss the goals and techniques of cognitive therapy and of cognitive-behavioral therapy.

71-4 Discuss the aims and benefits of group and family therapy.

behavior therapy therapy that applies learning principles to the elimination of unwanted behaviors.

Behavior Therapies

71-1 How does the basic assumption of behavior therapy differ from those of psychodynamic and humanistic therapies? What techniques are used in exposure therapies and aversive conditioning?

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The insight therapies assume that many psychological problems diminish as self-awareness grows. Psychodynamic therapies expect problems to subside as people gain insight into their unresolved and unconscious tensions. Humanistic therapies expect problems to diminish as people get in touch with their feelings. Proponents of **behavior therapy,** however, doubt the healing power of self-awareness. (You can become aware of why you are highly anxious during tests and still be anxious.) They assume that problem behaviors *are* the problems, and the application of learning principles can eliminate them. Rather than delving deeply below the surface looking for inner causes, therapies using behavioral techniques view maladaptive symptoms—such as phobias or sexual dysfunctions—as learned behaviors that can be replaced by constructive behaviors.

Classical Conditioning Techniques

AP® Exam Tip

Before you read the next several pages of this module, you may want to quickly review the material on classical and operant conditioning in Unit VI.

One cluster of behavior therapies derives from principles developed in Ivan Pavlov's early twentieth-century conditioning experiments (Module 26). As Pavlov and others showed, we learn various behaviors and emotions through classical conditioning. Could maladaptive symptoms be examples of conditioned responses? If so, might reconditioning be a solution? Learning theorist O. H. Mowrer thought so and developed a successful conditioning therapy for chronic bed-wetters. The child sleeps on a liquid-sensitive pad connected to an alarm. Moisture on the pad triggers the alarm, waking the child. With sufficient repetition, this association of bladder relaxation with waking up stops the bed-wetting. In three out

of four cases the treatment is effective, and the success provides a boost to the child's self-image (Christophersen & Edwards, 1992; Houts et al., 1994).

Another example: If a claustrophobic fear of elevators is a learned aversion to the stimulus of being in a confined space, then might one unlearn that association by undergoing another round of conditioning to replace the fear response? **Counterconditioning** pairs the trigger stimulus (in this case, the enclosed space of the elevator) with a new response (relaxation) that is incompatible with fear. Indeed, behavior therapists have successfully counterconditioned people with such fears. Two specific counterconditioning techniques—*exposure therapy* and *aversive conditioning*—replace unwanted responses.

counterconditioning behavior therapy procedures that use classical conditioning to evoke new responses to stimuli that are triggering unwanted behaviors; include *exposure therapies* and *aversive conditioning.*

exposure therapies behavioral techniques, such as *systematic desensitization* and *virtual reality exposure therapy,* that treat anxieties by exposing people (in imagination or actual situations) to the things they fear and avoid.

systematic desensitization a type of exposure therapy that associates a pleasant, relaxed state with gradually increasing anxiety-triggering stimuli. Commonly used to treat phobias.

EXPOSURE THERAPIES

Picture this scene reported in 1924 by psychologist Mary Cover Jones: Three-year-old Peter is petrified of rabbits and other furry objects. Jones plans to replace Peter's fear of rabbits with a conditioned response incompatible with fear. Her strategy is to associate the fear-evoking rabbit with the pleasurable, relaxed response associated with eating.

As Peter begins his midafternoon snack, Jones introduces a caged rabbit on the other side of the huge room. Peter, eagerly munching away on his crackers and drinking his milk, hardly notices. On succeeding days, she gradually moves the rabbit closer and closer. Within two months, Peter is tolerating the rabbit in his lap, even stroking it while he eats. Moreover, his fear of other furry objects subsides as well, having been *countered,* or replaced, by a relaxed state that cannot coexist with fear (Fisher, 1984; Jones, 1924).

Unfortunately for those who might have been helped by her counterconditioning procedures, Jones' story of Peter and the rabbit did not immediately become part of psychology's lore. It was more than 30 years later that psychiatrist Joseph Wolpe (1958; Wolpe & Plaud, 1997) refined Jones' technique into what are now the most widely used types of behavior therapies: **exposure therapies,** which expose people to what they normally avoid or escape (behaviors that get reinforced by reduced anxiety). Exposure therapies have them face their fear, and thus overcome their fear of the fear response itself. As people can habituate to the sound of a train passing their new apartment, so, with repeated exposure, can they become less anxiously responsive to things that once petrified them (Rosa-Alcázar et al., 2008; Wolitzky-Taylor et al., 2008).

One widely used exposure therapy is **systematic desensitization.** Wolpe assumed, as did Jones, that you cannot be simultaneously anxious and relaxed. Therefore, if you can repeatedly relax when facing anxiety-provoking stimuli, you can gradually eliminate your anxiety. The trick is to proceed gradually. Let's see how this might work with social anxiety disorder. Imagine yourself afraid of public speaking. A therapist might first ask for your help in constructing a hierarchy of anxiety-triggering speaking situations. Yours might range from mildly anxiety-provoking situations, perhaps speaking up in a small group of friends, to panic-provoking situations, such as having to address a large audience.

Next, using *progressive relaxation,* the therapist would train you to relax one muscle group after another, until you achieve a blissful state of complete relaxation and comfort. Then the therapist would ask you to imagine, with your eyes closed, a mildly anxiety-arousing situation: You are having coffee with a group of friends and are trying to decide whether to speak up. If imagining the scene causes you to feel any anxiety, you would signal your tension by raising your finger, and the therapist would instruct you to switch off the mental image and go back to deep relaxation. This imagined scene is repeatedly paired with relaxation until you feel no trace of anxiety.

The therapist would progress up the constructed anxiety hierarchy, using the relaxed state to desensitize you to each imagined situation. After several sessions, you move to actual situations and practice what you had only imagined before, beginning with relatively easy tasks and gradually moving to more anxiety-filled ones. Conquering your anxiety in an actual situation, not just in your imagination, raises your self-confidence (Foa & Kozak, 1986; Williams, 1987). Eventually, you may even become a confident public speaker.

Virtual reality exposure therapy Virtual reality technology exposes people to vivid simulations of feared stimuli, such as a plane's takeoff.

When an anxiety-arousing situation is too expensive, difficult, or embarrassing to re-create, **virtual reality exposure therapy** offers an efficient middle ground. Wearing a head-mounted display unit that projects a three-dimensional virtual world, you would view a lifelike series of scenes that would be tailored to your particular fear and shift as your head turned. Experiments led by several research teams have treated many different people with many different fears—flying, heights, particular animals, and public speaking (Parsons & Rizzo, 2008). People who fear flying, for example, can peer out a virtual window of a simulated plane, feel vibrations, and hear the engine roar as the plane taxis down the runway and takes off. In studies comparing control groups with people experiencing virtual reality exposure therapy, the therapy has provided greater relief from real-life fear (Hoffman, 2004; Krijn et al., 2004).

Developments in virtual reality therapy suggest the likelihood of increasingly sophisticated simulated worlds in which people, using avatars (computer representations of themselves), try out new behaviors in virtual environments (Gorini, 2007). For example, someone with social anxiety disorder might visit virtual parties or group discussions, which others join over time.

virtual reality exposure therapy an anxiety treatment that progressively exposes people to electronic simulations of their greatest fears, such as airplane flying, spiders, or public speaking.

aversive conditioning a type of counterconditioning that associates an unpleasant state (such as nausea) with an unwanted behavior (such as drinking alcohol).

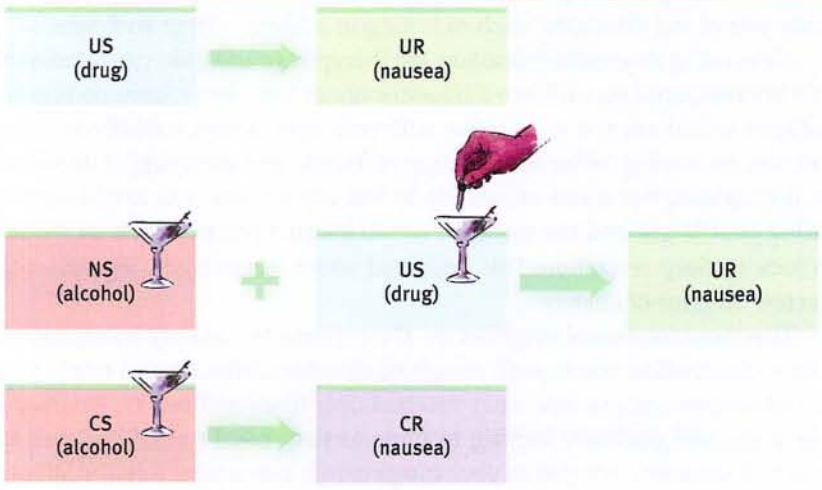
AVERSIVE CONDITIONING

In systematic desensitization, the goal is substituting a positive (relaxed) response for a negative (fearful) response to a *harmless* stimulus. In **aversive conditioning,** the goal is substituting a negative (aversive) response for a positive response to a *harmful* stimulus (such as alcohol). Thus, aversive conditioning is the reverse of systematic desensitization—it seeks to condition an aversion to something the person *should* avoid.

The procedure is simple: It associates the unwanted behavior with unpleasant feelings. To treat nail biting, one can paint the fingernails with a nasty-tasting nail polish (Baskind, 1997). To treat alcohol use disorder, an aversion therapist offers the client appealing drinks laced with a drug that produces severe nausea. By linking alcohol with violent nausea (recall the taste-aversion experiments with rats and coyotes in Module 29), the therapist seeks to transform the person's reaction to alcohol from positive to negative (**FIGURE 71.1**).

Figure 71.1

Aversion therapy for alcohol use disorder After repeatedly imbibing an alcoholic drink mixed with a drug that produces severe nausea, some people with a history of alcohol use disorder develop at least a temporary conditioned aversion to alcohol. (Remember: US is unconditioned stimulus, UR is unconditioned response, NS is neutral stimulus, CS is conditioned stimulus, and CR is conditioned response.)



Does aversive conditioning work? In the short run it may. Arthur Wiens and Carol Menustik (1983) studied 685 patients with alcohol use disorder who completed an aversion therapy program at a Portland, Oregon, hospital. One year later, after returning for several booster treatments of alcohol-sickness pairings, 63 percent were still successfully abstaining. But after three years, only 33 percent had remained abstinent.

The problem is that cognition influences conditioning. People know that outside the therapist's office they can drink without fear of nausea. Their ability to discriminate between the aversive conditioning situation and all other situations can limit the treatment's effectiveness. Thus, therapists often use aversive conditioning in combination with other treatments.

Operant Conditioning

71-2 What is the main premise of therapy based on operant conditioning principles, and what are the views of its proponents and critics?

Pioneering researcher B. F. Skinner helped us understand the basic concept in operant conditioning (Modules 27 and 28) that voluntary behaviors are strongly influenced by their consequences. Knowing this, today's therapists can practice *behavior modification*—reinforcing desired behaviors, and withholding reinforcement for undesired behaviors. Using operant conditioning to solve specific behavior problems has raised hopes for some otherwise hopeless cases. Children with intellectual disabilities have been taught to care for themselves. Socially withdrawn children with autism spectrum disorder (ASD) have learned to interact. People with schizophrenia have been helped to behave more rationally in their hospital ward. In such cases, therapists use positive reinforcers to shape behavior in a step-by-step manner, rewarding closer and closer approximations of the desired behavior.

In extreme cases, treatment must be intensive. One study worked with 19 withdrawn, uncommunicative 3-year-olds with ASD. Each participated in a 2-year program in which their parents spent 40 hours a week attempting to shape their behavior (Lovaas, 1987). The combination of positively reinforcing desired behaviors, and ignoring or punishing aggressive and self-abusive behaviors, worked wonders for some. By first grade, 9 of the 19 children were functioning successfully in school and exhibiting normal intelligence. In a group of 40 comparable children not undergoing this effortful treatment, only one showed similar improvement. (Ensuing studies suggested that positive reinforcement without punishment was most effective.)

Rewards used to modify behavior vary. For some people, the reinforcing power of attention or praise is sufficient. Others require concrete rewards, such as food. In institutional settings, therapists may create a **token economy.** When people display appropriate behavior, such as getting out of bed, washing, dressing, eating, talking coherently, cleaning up their rooms, or playing cooperatively, they receive a token or plastic coin as a positive reinforcer. Later, they can exchange their accumulated tokens for various rewards, such as candy, TV time, trips to town, or better living quarters. Token economies have been successfully applied in various settings (homes, classrooms, hospitals, institutions for juvenile offenders) and among members of various populations (including disturbed children and people with schizophrenia and other mental disabilities).

token economy an operant conditioning procedure in which people earn a token of some sort for exhibiting a desired behavior and can later exchange the tokens for various privileges or treats.

Critics of behavior modification express two concerns. The first is practical: *How durable are the behaviors?* Will people become so dependent on extrinsic rewards that the appropriate behaviors will stop when the reinforcers stop? Proponents of behavior modification believe the behaviors will endure if therapists wean patients from the tokens by shifting them toward other, real-life rewards, such as social approval. They also point out that the appropriate behaviors themselves can be intrinsically rewarding. For example, as a withdrawn person becomes more socially competent, the intrinsic satisfactions of social interaction may help the person maintain the behavior.

The second concern is ethical: *Is it right for one human to control another's behavior?* Those who set up token economies deprive people of something they desire and decide which behaviors to reinforce. To critics, this whole process has an authoritarian taint. Advocates reply that some patients request the therapy. Moreover, control already exists; rewards and punishers are already maintaining destructive behavior patterns. So why not reinforce adaptive behavior instead? Treatment with positive rewards is more humane than being institutionalized or punished, advocates argue, and the right to effective treatment and an improved life justifies temporary deprivation.

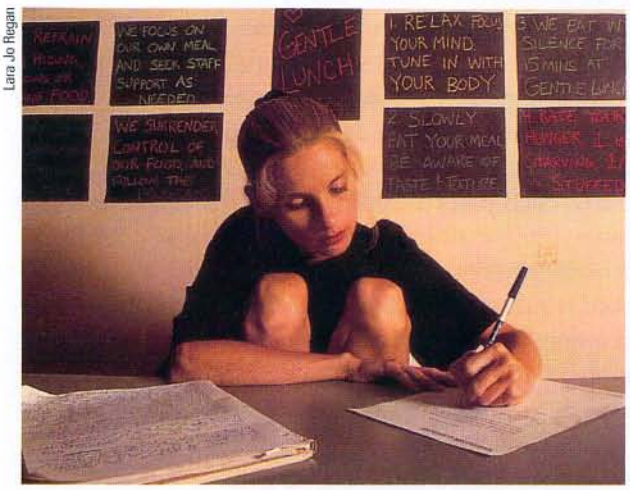
Cognitive Therapies

71-3 What are the goals and techniques of cognitive therapy and of cognitive-behavioral therapy?

AP® Exam Tip

Behavior therapies focus on what we do. Cognitive therapies focus on what we think. That's a very basic distinction, but it is critically important for your understanding.

We have seen how behavior therapies treat specific fears and problem behaviors. But how do they deal with major depression? Or with generalized anxiety disorder, in which anxiety has no focus and developing a hierarchy of anxiety-triggering situations is difficult? Therapists treating these less clearly defined psychological problems have had help from the same *cognitive revolution* that has profoundly changed other areas of psychology during the last half-century.



Lara Jo Regan

Cognitive therapy for eating disorders aided by journaling Cognitive therapists guide people toward new ways of explaining their good and bad experiences. By recording positive events and how she has enabled them, this woman may become more mindful of her self-control and more optimistic.

cognitive therapy therapy that teaches people new, more adaptive ways of thinking; based on the assumption that thoughts intervene between events and our emotional reactions.

"Life does not consist mainly, or even largely, of facts and happenings. It consists mainly of the storm of thoughts that are forever blowing through one's mind." -Mark Twain, 1835–1910

The **cognitive therapies** assume that our thinking colors our feelings (**FIGURE 71.2**). Between the event and our response lies the mind. Self-blaming and overgeneralized explanations of bad events are often an integral part of the vicious cycle of depression (see Module 67). The depressed person interprets a suggestion as criticism, disagreement as dislike, praise as flattery, friendliness as pity. Ruminating on such thoughts sustains the negative thinking. If such thinking patterns can be learned, then surely they can be replaced. Cognitive therapists therefore try in various ways to teach people new, more constructive ways of thinking. If people are miserable, they can be helped to change their minds.

Figure 71.2

A cognitive perspective on psychological disorders The person's emotional reactions are produced not directly by the event but by the person's thoughts in response to the event.

Rational-Emotive Behavior Therapy

rational-emotive behavior therapy (REBT) a confrontational cognitive therapy, developed by Albert Ellis, that vigorously challenges people's illogical, self-defeating attitudes and assumptions.

According to Albert Ellis (1962, 1987, 1993), the creator of **rational-emotive behavior therapy (REBT),** many problems arise from irrational thinking. For example, he described a disturbed woman and suggested how therapy might challenge her illogical, self-defeating assumptions (Ellis, 2011, pp. 198–199):

> [She] does not merely believe it is undesirable if her lover rejects her. She tends to believe, also, that (a) it is awful; (b) she cannot stand it; (c) she should not, *must* not be rejected; (d) she will never be accepted by any desirable partner; (e) she is a worthless person because one lover has rejected her; and (f) she deserves to be rejected for being so worthless. Such common covert hypotheses are illogical, unrealistic, and destructive. . . . They can be easily elicited and demolished by any scientist worth his or her salt; and the rational-emotive therapist is exactly that: an exposing and nonsense-annihilating scientist.

Change people's thinking by revealing the "absurdity" of their self-defeating ideas, the sharp-tongued Ellis believed, and you will change their self-defeating feelings and enable healthier behaviors.

Aaron Beck's Therapy for Depression

Cognitive therapist Aaron Beck also believes that changing people's thinking can change their functioning, though he has a gentler approach. Originally trained in Freudian techniques, Beck analyzed the dreams of depressed people. He found recurring negative themes of loss, rejection, and abandonment that extended into their waking thoughts. Such negativity even extends into therapy, as clients recall and rehearse their failings and worst impulses (Kelly, 2000). With cognitive therapy, Beck and his colleagues (1979) have sought to reverse clients' *catastrophizing* beliefs about themselves, their situations, and their futures. Gentle questioning seeks to reveal irrational thinking, and then to persuade people to remove the dark glasses through which they view life (Beck et al., 1979, pp. 145–146):

Client: I agree with the descriptions of me but I guess I don't agree that the way I think makes me depressed.

Beck: How do you understand it?

Client: I get depressed when things go wrong. Like when I fail a test.

Beck: How can failing a test make you depressed?

Client: Well, if I fail I'll never get into law school.

Beck: So failing the test means a lot to you. But if failing a test could drive people into clinical depression, wouldn't you expect everyone who failed the test to have a depression? . . . Did everyone who failed get depressed enough to require treatment?

Client: No, but it depends on how important the test was to the person.

Beck: Right, and who decides the importance?

Client: I do.

Beck: And so, what we have to examine is your way of viewing the test (or the way that you think about the test) and how it affects your chances of getting into law school. Do you agree?

Client: Right.

Beck: Do you agree that the way you interpret the results of the test will affect you? You might feel depressed, you might have trouble sleeping, not feel like eating, and you might even wonder if you should drop out of the course.

Client: I have been thinking that I wasn't going to make it. Yes, I agree.

Beck: Now what did failing mean?

Client: *(tearful)* That I couldn't get into law school.

Beck: And what does that mean to you?

Client: That I'm just not smart enough.

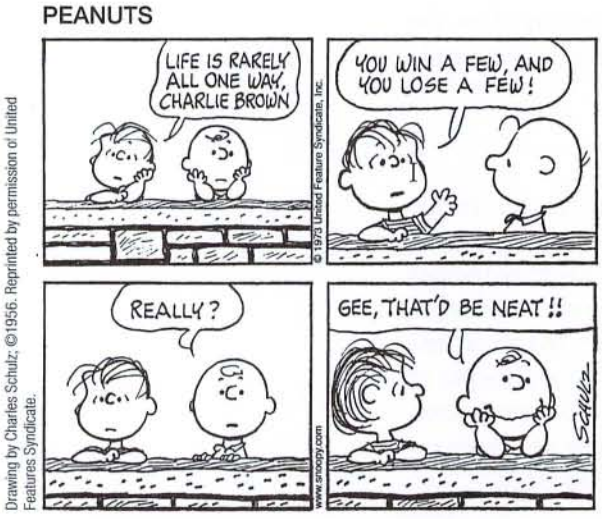
Beck: Anything else?

Client: That I can never be happy.

Beck: And how do these thoughts make you feel?

Client: Very unhappy.

Beck: So it is the meaning of failing a test that makes you very unhappy. In fact, believing that you can never be happy is a powerful factor in producing unhappiness. So, you get yourself into a trap—by definition, failure to get into law school equals "I can never be happy."



We often think in words. Therefore, getting people to change what they say to themselves is an effective way to change their thinking. Perhaps you can identify with the anxious students who, before a test, make matters worse with self-defeating thoughts: "This test's probably going to be impossible. All these other students seem so relaxed and confident. wish I were better prepared. Anyhow, I'm so nervous I'll forget everything." To change such negative self-talk, Donald Meichenbaum (1977, 1985) offered *stress inoculation training:* teaching people to restructure their thinking in stressful situations. Sometimes it may be enough simply to say more positive things to oneself: "Relax. The test may be hard, but it will be hard for everyone else, too. I studied harder than most people. Besides, I don't need a perfect score to get a good grade in this class." After being trained to dispute their negative thoughts, depression-prone children, teens, and college students exhibit a greatly reduced rate of future depression (Seligman, 2002; Seligman et al., 2009). To a large extent, it *is* the thought that counts. **TABLE 71.1** provides a sampling of techniques commonly used in cognitive therapy.

Table 71.1 Selected Cognitive Therapy Techniques

Aim of Technique	Technique	Therapists' Directives
Reveal beliefs	Question your interpretations	Explore your beliefs, revealing faulty assumptions such as "I must be liked by everyone."
	Rank thoughts and emotions	Gain perspective by ranking your thoughts and emotions from mildly to extremely upsetting.
Test beliefs	Examine consequences	Explore difficult situations, assessing possible consequences and challenging faulty reasoning.
	Decatastrophize thinking	Work through the actual worst-case consequences of the situation you face (it is often not as bad as imagined). Then determine how to cope with the real situation you face.
Change beliefs	Take appropriate responsibility	Challenge total self-blame and negative thinking, noting aspects for which you may be truly responsible, as well as aspects that aren't your responsibility.
	Resist extremes	Develop new ways of thinking and feeling to replace maladaptive habits. For example, change from thinking "I am a total failure" to "I got a failing grade on that paper, and I can make these changes to succeed next time."

Cognitive-Behavioral Therapy

Cognitive-behavioral therapy (CBT), a widely practiced integrative therapy, aims not only to alter the way people think (cognitive therapy), but also to alter the way they act (behavior therapy). It seeks to make people aware of their irrational negative thinking, to replace it with new ways of thinking, *and to practice* the more positive approach in everyday settings. Behavioral change is typically addressed first, followed by sessions on cognitive change; the therapy concludes with a focus on maintaining both and preventing relapses.

"The trouble with most therapy is that it helps you to feel better. But you don't get better. You have to back it up with action, action, action." -Therapist Albert Ellis (1913–2007)

Anxiety and mood disorders share a common problem: emotion regulation (Aldao & Nolen-Hoeksema, 2010). An effective CBT program for these emotional disorders trains people both to replace their catastrophizing thinking with more realistic appraisals, and, as homework, to practice behaviors that are incompatible with their problem (Kazantzis et al., 2010a,b; Moses & Barlow, 2006). A person might, for example, keep a log of daily situations associated with negative and positive emotions, and engage more in activities that lead them to feeling good. Or those who fear social situations might be assigned to practice approaching people.

CBT may also be useful with obsessive-compulsive disorder. In one study, people learned to prevent their compulsive behaviors by relabeling their obsessive thoughts (Schwartz et al., 1996). Feeling the urge to wash their hands again, they would tell themselves, "I'm having a compulsive urge," and attribute it to their brain's abnormal activity, as previously viewed in their PET scans. Instead of giving in to the urge, they would then spend 15 minutes in an enjoyable, alternative behavior, such as practicing an instrument, taking a walk, or gardening. This helped "unstick" the brain by shifting attention and engaging other brain areas. For two or three months, the weekly therapy sessions continued, with relabeling and refocusing practice at home. By the study's end, most participants' symptoms had diminished and their PET scans revealed normalized brain activity. Many other studies confirm CBT's effectiveness for those with anxiety, depression, or anorexia nervosa (Covin et al., 2008; Mitte, 2005; Norton & Price, 2007). Studies have also found that cognitive-behavioral skills can be effectively taught and therapy conducted over the Internet (Barak et al., 2008; Kessler et al., 2009; Marks & Cavanaugh, 2009; Stross, 2011).

cognitive-behavioral therapy (CBT) a popular integrative therapy that combines cognitive therapy (changing self-defeating thinking) with behavior therapy (changing behavior).

group therapy therapy conducted with groups rather than individuals, permitting therapeutic benefits from group interaction.

Group and Family Therapies

71-4 What are the aims and benefits of group and family therapy?

Group Therapy

Except for traditional psychoanalysis, most therapies may also occur in small groups. **Group therapy** does not provide the same degree of therapist involvement with each client. However, it offers benefits:

- *It saves therapists' time and clients' money,* often with no less effectiveness than individual therapy (Fuhriman & Burlingame, 1994).
- *It offers a social laboratory for exploring social behaviors and developing social skills.* Therapists frequently suggest group therapy for people experiencing frequent conflicts or whose behavior distresses others. For up to 90 minutes weekly, the therapist guides people's interactions as they discuss issues and try out new behaviors.

Photograph Courtesy of Muse Entertainment Enterprises Inc.

Group Therapy ABC Family's and *Seventeen Magazine's* 2011 film *Cyberbully* realistically portrayed main characters attending group therapy, where they found they were not alone in their troublesome feelings.

- *It enables people to see that others share their problems.* It can be a relief to discover that you are not alone—to learn that others, despite their composure, experience some of the same troublesome feelings and behaviors.
- *It provides feedback as clients try out new ways of behaving.* Hearing that you look poised, even though you feel anxious and self-conscious, can be very reassuring.

Family Therapy

One special type of group interaction, **family therapy,** assumes that no person is an island: We live and grow in relation to others, especially our families. We struggle to differentiate ourselves from our families, but we also need to connect with them emotionally. Some of our problem behaviors arise from the tension between these two tendencies, which can create family stress.

Unlike most psychotherapy, which focuses on what happens inside the person's own skin, family therapists work with multiple family members to heal relationships and to mobilize family resources. They tend to view the family as a system in which each person's actions trigger reactions from others, and they help family members discover their role within their family's social system. A child's rebellion, for example, affects and is affected by other family tensions. Therapists also attempt—usually with some success, research suggests—to open up communication within the family or to help family members discover new ways of preventing or resolving conflicts (Hazelrigg et al., 1987; Shadish et al., 1993).

Self-Help Groups

Many people also participate in self-help and support groups (Yalom, 1985). One analysis of online support groups and more than 14,000 self-help groups reported that most support groups focus on stigmatized or hard-to-discuss illnesses (Davison et al., 2000). AIDS patients, for example, are 250 times more likely than hypertension patients to be in support groups. Those struggling with anorexia and alcohol use disorder often join groups; those with migraines and ulcers usually do not. People with hearing loss have national organizations with local chapters; people with vision loss more often cope on their own.

The grandparent of support groups, Alcoholics Anonymous (AA), reports having more than 2 million members in 114,000 groups worldwide. Its famous 12-step program, emulated by many other self-help groups, asks members to admit their powerlessness, to seek help from a higher power and from one another, and (the twelfth step) to take the message to others in need of it. In one eight-year, $27 million investigation, AA participants reduced their drinking sharply, although so did those assigned to cognitive-behavioral therapy or to "motivational therapy" (Project Match, 1997). Other studies have similarly found that 12-step programs such as AA have helped reduce alcohol use disorder comparably with other treatment interventions (Ferri et al., 2006; Moos & Moos, 2005). The more meetings members attend, the greater their alcohol abstinence (Moos & Moos, 2006). In one study of 2300 veterans who sought treatment for alcohol use disorder, a high level of AA involvement was followed by diminished alcohol problems (McKellar et al., 2003).

In an individualistic age, with more and more people living alone or feeling isolated, the popularity of support groups—for the addicted, the bereaved, the divorced, or simply those seeking fellowship and growth—seems to reflect a longing for community and connectedness. More than 100 million Americans belong to small religious, interest, or self-help groups that meet regularly—and 9 in 10 report that group members "support each other emotionally" (Gallup, 1994).

* * *

For a synopsis of the modern forms of psychotherapy we've been discussing, see **TABLE 71.2.**

FYI

With more than 2 million members worldwide, AA is said to be "the largest organization on Earth that nobody wanted to join" (Finlay, 2000).

family therapy therapy that treats the family as a system. Views an individual's unwanted behaviors as influenced by, or directed at, other family members.

Table 71.2 Comparing Modern Psychotherapies

Therapy	Presumed Problem	Therapy Aim	Therapy Technique
Psychodynamic	Unconscious conflicts from childhood experiences	Reduce anxiety through self-insight.	Interpret patients' memories and feelings.
Client-centered	Barriers to self-understanding and self-acceptance	Enable growth via unconditional positive regard, genuineness, and empathy.	Listen actively and reflect clients' feelings.
Behavior	Dysfunctional behaviors	Relearn adaptive behaviors; extinguish problem ones.	Use classical conditioning (via exposure or aversion therapy) or operant conditioning (as in token economies).
Cognitive	Negative, self-defeating thinking	Promote healthier thinking and self-talk.	Train people to dispute negative thoughts and attributions.
Cognitive-behavioral	Self-harmful thoughts and behaviors	Promote healthier thinking and adaptive behaviors.	Train people to counter self-harmful thoughts and to act out their new ways of thinking.
Group and family	Stressful relationships	Heal relationships.	Develop an understanding of family and other social systems, explore roles, and improve communication.

Before You Move On

► ASK YOURSELF

Critics say that behavior modification techniques, such as those used in token economies, are inhumane. Do you agree or disagree? Why?

► TEST YOURSELF

What is the major distinction between the underlying assumptions in insight therapies and in behavior therapies?

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

Module 71 Review

71-1 How does the basic assumption of behavior therapy differ from those of psychodynamic and humanistic therapies? What techniques are used in exposure therapies and aversive conditioning?

- *Behavior therapies* are not insight therapies. Their goal is to apply learning principles to modify problem behaviors.
- Classical conditioning techniques, including *exposure therapies* (such as *systematic desensitization* or *virtual reality exposure therapy*) and *aversive conditioning*, attempt to change behaviors through *counterconditioning*—evoking new responses to old stimuli that trigger unwanted behaviors.

71-2 What is the main premise of therapy based on operant conditioning principles, and what are the views of its proponents and critics?

- Therapy based on operant conditioning principles uses behavior modification techniques to change unwanted behaviors through positively reinforcing desired behaviors and ignoring or punishing undesirable behaviors.
- Critics maintain that (1) techniques such as those used in *token economies* may produce behavior changes that disappear when rewards end, and (2) deciding which behaviors should change is authoritarian and unethical.
- Proponents argue that treatment with positive rewards is more humane than punishing people or institutionalizing them for undesired behaviors.

71-3 What are the goals and techniques of cognitive therapy and of cognitive-behavioral therapy?

- The *cognitive therapies*, such as Aaron Beck's cognitive therapy for depression, assume that our thinking influences our feelings, and that the therapist's role is to change clients' self-defeating thinking by training them to view themselves in more positive ways.
- *Rational-emotive behavior therapy (REBT)* is a confrontational cognitive therapy that actively challenges irrational beliefs.
- The widely researched and practiced *cognitive-behavioral therapy (CBT)* combines cognitive therapy and behavior therapy by helping clients regularly act out their new ways of thinking and talking in their everyday life.

71-4 What are the aims and benefits of group and family therapy?

- *Group therapy* sessions can help more people and costs less per person than individual therapy would. Clients may benefit from exploring feelings and developing social skills in a group situation, from learning that others have similar problems, and from getting feedback on new ways of behaving.
- *Family therapy* views a family as an interactive system and attempts to help members discover the roles they play and to learn to communicate more openly and directly.

Multiple-Choice Questions

1. Dr. Welle tries to help her clients by teaching them to modify the things they do when under stress or experiencing symptoms. This means that Dr. Welle engages in _____ therapy.

a. behavior
b. cognitive
c. group
d. rational-emotive behavior
e. client-centered

2. Mary Cover Jones helped a little boy named Peter overcome his fear of rabbits by gradually moving a rabbit closer to him each day while he was eating his snack. This was one of the first applications of

a. group therapy.
b. virtual reality exposure therapy.
c. aversive therapy.
d. exposure therapy.
e. cognitive therapy.

3. On which of the following are token economies based?

a. Classical conditioning
b. Operant conditioning
c. Group therapy
d. Cognitive therapy
e. Cognitive-behavioral therapy

4. Which of the following is considered a benefit of group therapy?

a. It is the most effective therapy for children.
b. It is particularly effective in the treatment of antisocial personality disorder.
c. It is particularly effective in the treatment of schizophrenia.
d. It is the only setting proven effective for virtual reality exposure therapy.
e. It saves time and money when compared with other forms of therapy.

Practice FRQs

1. Name and describe two specific types of group therapy.

Answer

1 point: Family therapy is a means of treating an entire family as an interdependent system.

1 point: Self-help groups, such as Alcoholics Anonymous (AA), are groups of individuals who share a similar problem working together to overcome that problem.

2. Explain what systematic desensitization is, then describe the two major components of the therapy.

(3 points)

Module 72

Evaluating Psychotherapies and Prevention Strategies


RubberBall/SuperStock

Module Learning Objectives

- **72-1** Discuss whether psychotherapy works as interpreted by clients, clinicians, and outcome research.
- **72-2** Describe which psychotherapies are most effective for specific disorders.
- **72-3** Discuss how alternative therapies fare under scientific scrutiny.
- **72-4** Describe the three elements shared by all forms of psychotherapy.
- **72-5** Discuss how culture, gender, and values influence the therapist-client relationship.
- **72-6** Identify some guidelines for selecting a therapist.
- **72-7** Explain the rationale of preventive mental health programs.

Evaluating Psychotherapies

Advice columnists frequently urge their troubled letter writers to get professional help: "Don't give up. Find a therapist who can help you. Make an appointment."

Many Americans share this confidence in psychotherapy's effectiveness. Before 1950, psychiatrists were the primary providers of mental health care. Today's providers include clinical and counseling psychologists; clinical social workers; clergy; marital and school counselors; and psychiatric nurses. With such an enormous outlay of time as well as money, effort, and hope, it is important to ask: Are the millions of people worldwide justified in placing their hopes in psychotherapy?

Is Psychotherapy Effective?

72-1 Does psychotherapy work? Who decides?

The question, though simply put, is not simple to answer. Measuring therapy's effectiveness is not like taking your body's temperature to see if your fever has gone away. If you and I were to undergo psychotherapy, how would we assess its effectiveness? By how we feel about our progress? By how our therapist feels about it? By how our friends and family feel about it? By how our behavior has changed?

CLIENTS' PERCEPTIONS

If clients' testimonials were the only measuring stick, we could strongly affirm the effectiveness of psychotherapy. When 2900 *Consumer Reports* readers (1995; Kotkin et al., 1996; Seligman, 1995) related their experiences with mental health professionals, 89 percent said they were at least "fairly well satisfied." Among those who recalled feeling *fair* or *very poor* when beginning therapy, 9 in 10 now were feeling *very good, good,* or at least *so-so*. We have their word for it—and who should know better?

We should not dismiss these testimonials lightly. But for several reasons, client testimonials do not persuade psychotherapy's skeptics:

- ***People often enter therapy in crisis.*** When, with the normal ebb and flow of events, the crisis passes, people may attribute their improvement to the therapy.
- ***Clients may need to believe the therapy was worth the effort.*** To admit investing time and money in something ineffective is like admitting to having one's car serviced repeatedly by a mechanic who never fixes it. Self-justification is a powerful human motive.
- ***Clients generally speak kindly of their therapists.*** Even if the problems remain, say the critics, clients "work hard to find something positive to say. The therapist had been very understanding, the client had gained a new perspective, he learned to communicate better, his mind was eased, anything at all so as not to have to say treatment was a failure" (Zilbergeld, 1983, p. 117).

Feng Li/Getty Images

Trauma These women were mourning the tragic loss of lives and homes in the 2010 earthquake in China. Those who suffer through such trauma may benefit from counseling, though many people recover on their own, or with the help of supportive relationships with family and friends. "Life itself still remains a very effective therapist," noted psychodynamic therapist Karen Horney (*Our Inner Conflicts*, 1945).

As earlier units document, we are prone to selective and biased recall and to making judgments that confirm our beliefs. Consider the testimonials gathered in a massive experiment with over 500 Massachusetts boys, aged 5 to 13 years, many of whom seemed bound for delinquency. By the toss of a coin, half the boys were assigned to a 5-year treatment program. The treated boys were visited by counselors twice a month. They participated in community programs, and they received academic tutoring, medical attention, and family assistance as needed. Some 30 years later, Joan McCord (1978, 1979) located 485 participants, sent them questionnaires, and checked public records from courts, mental hospitals, and other sources. Was the treatment successful?

Client testimonials yielded encouraging results, even glowing reports. Some men noted that, had it not been for their counselors, "I would probably be in jail," "My life would have gone the other way," or "I think I would have ended up in a life of crime." Court records offered apparent support: Even among the "difficult" boys in the treatment group, 66 percent had no official juvenile crime record.

But recall psychology's most powerful tool for sorting reality from wishful thinking: the *control group*. For every boy in the treatment group, there was a similar boy in a control group, receiving no counseling. Of these untreated men, *70 percent* had no juvenile record. On several other measures, such as a record of having committed a second crime, alcohol use disorder, death rate, and job satisfaction, the untreated men exhibited slightly *fewer* problems. The glowing testimonials of those treated had been unintentionally deceiving.

CLINICIANS' PERCEPTIONS

Do clinicians' perceptions give us any more reason to celebrate? Case studies of successful treatment abound. The problem is that clients justify entering psychotherapy by emphasizing their unhappiness and justify leaving by emphasizing their well-being. Therapists treasure compliments from clients as they say good-bye or later express their gratitude, but they hear little from clients who experience only temporary relief and seek out new therapists for their recurring problems. Thus, the same person—with the same recurring anxieties, depression, or marital difficulty—may be a "success" story in several therapists' files.

Because people enter therapy when they are extremely unhappy, and usually leave when they are less extremely unhappy, most therapists, like most clients, testify to therapy's success—regardless of the treatment (see Thinking Critically About: "Regressing" From Unusual to Usual on the next page).

Thinking Critically About

"Regressing" From Unusual to Usual

Clients' and therapists' perceptions of therapy's effectiveness are vulnerable to inflation from two phenomena. One is the *placebo effect*—the power of belief in a treatment. If you think a treatment is going to be effective, it just may be (thanks to the healing power of your positive expectations).

The second phenomenon is **regression toward the mean**—the tendency for unusual events (or emotions) to "regress" (return) to their average state. Thus, extraordinary happenings (feeling low) tend to be followed by more ordinary ones (a return to our more usual state). Indeed, when things hit bottom, whatever we try—going to a psychotherapist, starting yoga, doing aerobic exercise—is more likely to be followed by improvement than by further descent.

> "Once you become sensitized to it, you see regression everywhere."
>
> Psychologist Daniel Kahneman (1985)

The point may seem obvious, yet we regularly miss it: We sometimes attribute what may be a normal regression (the expected return to normal) to something we have done. Consider:

- Students who score much lower or higher on a test than they usually do are likely, when retested, to return toward their average.
- Unusual ESP subjects who defy chance when first tested nearly always lose their "psychic powers" when retested (a phenomenon parapsychologists have called the decline effect).
- Coaches often yell at their players after an unusually bad first half. They may then feel rewarded for having done so when the team's performance improves (returns to normal) during the second half.

In each case, the cause-effect link may be genuine. Each may, however, be an instance of the natural tendency for behavior to regress from the unusual to the more usual. And this defines the task for therapy-efficacy research: Does the client's improvement following a particular therapy exceed what could be expected from the placebo and regression effects alone, shown by comparison with control groups?

regression toward the mean the tendency for extreme or unusual scores to fall back (regress) toward their average.

OUTCOME RESEARCH

How, then, can we objectively measure the effectiveness of psychotherapy if neither clients nor clinicians can tell us? How can we determine which people and problems are best helped, and by what type of psychotherapy?

In search of answers, psychologists have turned to controlled research studies. Similar research in the 1800s transformed the field of medicine. Physicians, skeptical of many of the fashionable treatments (bleeding, purging, infusions of plant and metal substances), began to realize that many patients got better on their own, without these treatments, and that others died despite them. Sorting fact from superstition required observing patients with and without a particular treatment. Typhoid fever patients, for example, often improved after being bled, convincing most physicians that the treatment worked. Not until a control group was given mere bed rest—and 70 percent were observed to improve after five weeks of fever—did physicians learn, to their shock, that the bleeding was worthless (Thomas, 1992).

In psychology, the opening challenge to the effectiveness of psychotherapy was issued by British psychologist Hans Eysenck (1952). Launching a spirited debate, he summarized studies showing that two-thirds of those receiving psychotherapy for nonpsychotic disorders improved markedly. To this day, no one disputes that optimistic estimate.

Why, then, are we still debating psychotherapy's effectiveness? Because Eysenck also reported similar improvement among *untreated* persons, such as those who were on waiting lists. With or without psychotherapy, he said, roughly two-thirds improved noticeably. Time was a great healer.

Later research revealed shortcomings in Eysenck's analyses; his sample was small (only 24 studies of psychotherapy outcomes in 1952). Today, hundreds of studies are available. The best are *randomized clinical trials,* in which researchers randomly assign people on a waiting list to therapy or to no therapy, and later evaluate everyone, using tests and assessments

by others who don't know whether therapy was given. The results of many such studies are then digested by means of **meta-analysis,** a statistical procedure that combines the conclusions of a large number of different studies. Simply said, meta-analyses give us the bottom-line results of lots of studies.

Psychotherapists welcomed the first meta-analysis of some 475 psychotherapy outcome studies (Smith et al., 1980). It showed that the average therapy client ends up better off than 80 percent of the untreated individuals on waiting lists (**FIGURE 72.1**). The claim is modest—by definition, about 50 percent of untreated people also are better off than the average untreated person. Nevertheless, Mary Lee Smith and her colleagues exulted that "psychotherapy benefits people of all ages as reliably as schooling educates them, medicine cures them, or business turns a profit" (p. 183).

AP® Exam Tip

You will need to understand what basic statistical concepts are, but you will not need to do any actual calculations on the AP® exam.

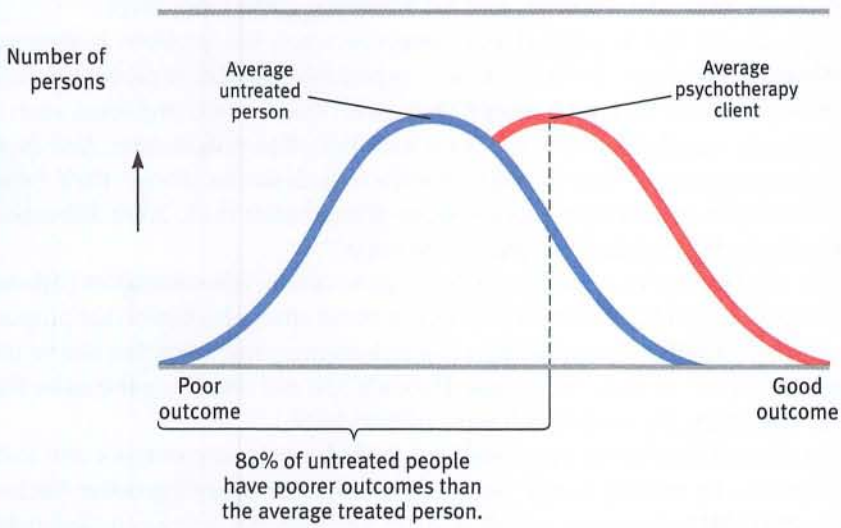


Figure 72.1

Treatment versus no treatment These two normal distribution curves based on a meta-analysis (combining data from 475 studies) show the improvement of untreated people and psychotherapy clients. The outcome for the average therapy client surpassed that for 80 percent of the untreated people. (Adapted from Smith et al., 1980.)

Dozens of subsequent summaries have now examined this question. Their verdict echoes the results of the earlier outcome studies: *Those not undergoing therapy often improve, but those undergoing therapy are more likely to improve more quickly, and with less risk of relapse.*

Is psychotherapy also cost-effective? Again, the answer is *Yes.* Studies show that when people seek psychological treatment, their search for other medical treatment drops—by 16 percent in one digest of 91 studies (Chiles et al., 1999). Given the staggering annual cost of psychological disorders and substance abuse—including crime, accidents, lost work, and treatment—psychotherapy is a good investment, much like money spent on prenatal and well-baby care. Both *reduce* long-term costs. Boosting employees' psychological well-being, for example, can lower medical costs, improve work efficiency, and diminish absenteeism.

But note that the claim—that psychotherapy, *on average,* is somewhat effective—refers to no one therapy in particular. It is like reassuring lung-cancer patients that "on average," medical treatment of health problems is effective. What people want to know is the effectiveness of a *particular* treatment for their specific problems.

meta-analysis a procedure for statistically combining the results of many different research studies.

The Relative Effectiveness of Different Psychotherapies

72-2 Are some psychotherapies more effective than others for specific disorders?

So what can we tell people considering psychotherapy, and those paying for it, about *which* psychotherapy will be most effective for their problem? The statistical summaries and surveys fail to pinpoint any one type of therapy as generally superior (Smith et al., 1977, 1980). Clients seemed equally satisfied, *Consumer Reports* concluded, whether treated by a psychiatrist,

"Whatever differences in treatment efficacy exist, they appear to be extremely small, at best." -Bruce Wampold et al., 1997

"Different sores have different salves." -English proverb

psychologist, or social worker; whether seen in a group or individual context; whether the therapist had extensive or relatively limited training and experience (Seligman, 1995). Other studies concur. There is little if any connection between clinicians' experience, training, supervision, and licensing and their clients' outcomes (Luborsky et al., 2002; Wampold, 2007).

So, was the dodo bird in Alice in Wonderland right: "Everyone has won and all must have prizes"? Not quite. Some forms of therapy get prizes for particular problems, though there is often an overlapping—or comorbidity—of disorders. Behavioral conditioning therapies, for example, have achieved especially favorable results with specific behavior problems, such as bed-wetting, phobias, compulsions, marital problems, and sexual dysfunctions (Baker et al., 2008; Hunsley & DiGiulio, 2002; Shadish & Baldwin, 2005). Psychodynamic therapy has helped treat depression and anxiety (Driessen et al., 2010; Leichsenring & Rabung, 2008; Shedler, 2010b). And new studies confirm cognitive and cognitive-behavioral therapy's effectiveness in coping with anxiety, posttraumatic stress disorder, and depression (Baker et al., 2008; De Los Reyes & Kazdin, 2009; Stewart & Chambliss, 2009; Tolin, 2010).

Moreover, we can say that therapy is most effective when the problem is clear-cut (Singer, 1981; Westen & Morrison, 2001). Those who experience phobias or panic and those who are unassertive can hope for improvement. Those with less-focused problems, such as depression and anxiety, usually benefit in the short term but often relapse later. And those with the negative symptoms of chronic schizophrenia or a desire to change their entire personality are unlikely to benefit from therapy alone (Pfammatter et al., 2006; Zilbergeld, 1983). The more specific the problem, the greater the hope.

But no prizes—and little or no scientific support—go to certain other therapies (Arkowitz & Lilienfeld, 2006). We would all therefore be wise to avoid energy therapies that propose to manipulate people's invisible energy fields, recovered-memory therapies that aim to unearth "repressed memories" of early child abuse (Module 33), and rebirthing therapies that engage people in reenacting the supposed trauma of their birth.

evidence-based practice clinical decision making that integrates the best available research with clinical expertise and patient characteristics and preferences.

As with some medical treatments, it's possible for psychological treatments not only to be ineffective but harmful—by making people worse or preventing their getting better (Barlow, 2010; Castonguay et al., 2010; Dimidjian & Hollon, 2010). The National Science and Technology Council cites the Scared Straight program (seeking to deter children and youth from crime) as an example of well-intentioned programs that have proved ineffective or even harmful. The evaluation question—which therapies get prizes and which do not?—lies at the heart of what some call psychology's civil war. To what extent should science guide both clinical practice and the willingness of health care providers and insurers to pay for therapy?

On the one side are research psychologists using scientific methods to extend the list of well-defined and validated therapies for various disorders. They decry clinicians who "give more weight to their personal experiences" (Baker et al., 2008). On the other side are nonscientist therapists who view their practice as more art than science, saying that people are too complex and therapy too intuitive to describe in a manual or test in an experiment. Between these two factions stand the science-oriented clinicians, who aim to base practice on evidence and make mental health professionals accountable for effectiveness.

To encourage **evidence-based practice** in psychology, the American Psychological Association and others (2006; Baker et al., 2008; Levant & Hasan, 2008) have followed the Institute of Medicine's lead, advocating that clinicians integrate the best available research with clinical expertise and with patient preferences and characteristics. Available therapies "should be rigorously evaluated" and then applied by clinicians who are mindful of their skills and of each patient's unique situation (**FIGURE 72.2**). Increasingly, insurer and government support for mental health services requires evidence-based practice. In 2007, for example, Britain's National Health Service announced that it would pour the equivalent of $600 million into training new mental health workers in evidence-based practices (such as cognitive-behavioral therapy) and to disseminating information about such treatments (DeAngelis, 2008).

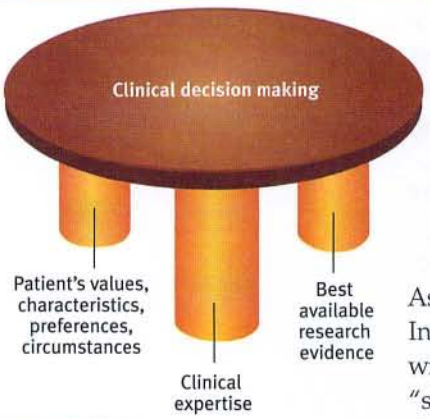


Figure 72.2

Evidence-based clinical decision making The ideal clinical decision making is a three-legged stool, upheld by research evidence, clinical expertise, and knowledge of the patient.

Evaluating Alternative Therapies

72-3 How do alternative therapies fare under scientific scrutiny?

The tendency of many abnormal states of mind to regress to normal, combined with the placebo effect, creates fertile soil for pseudotherapies. Bolstered by anecdotes, heralded by the media, and broadcast on the Internet, alternative therapies can spread like wildfire. In one national survey, 57 percent of those with a history of anxiety attacks and 54 percent of those with a history of depression had used alternative treatments, such as herbal medicine, massage, and spiritual healing (Kessler et al., 2001).

Testimonials aside, what does the evidence say? This is a tough question, because there is no evidence for or against most of them, though their proponents often feel personal experience is evidence enough. Some, however, have been the subject of controlled research. Let's consider two of them. As we do, remember that sifting sense from nonsense requires the scientific attitude: being skeptical but not cynical, open to surprises but not gullible.

EYE MOVEMENT DESENSITIZATION AND REPROCESSING (EMDR)

EMDR (eye movement desensitization and reprocessing) is a therapy adored by thousands and dismissed by thousands more as a sham—"an excellent vehicle for illustrating the differences between scientific and pseudoscientific therapy techniques," suggested James Herbert and seven others (2000). Francine Shapiro (1989, 2007) developed EMDR while walking in a park and observing that anxious thoughts vanished as her eyes spontaneously darted about. Offering her novel anxiety treatment to others, she had people imagine traumatic scenes while she triggered eye movements by waving her finger in front of their eyes, supposedly enabling them to unlock and reprocess previously frozen memories. Tens of thousands of mental health professionals from more than 75 countries have since undergone training (EMDR, 2011). Not since the similarly charismatic Franz Anton Mesmer introduced *animal magnetism* (hypnosis) more than two centuries ago (also after feeling inspired by an outdoor experience) has a new therapy attracted so many devotees so quickly.

Does it work? For 84 to 100 percent of single-trauma victims participating in four studies, the answer is *Yes,* reports Shapiro (1999, 2002). Moreover, the treatment need take no more than three 90-minute sessions. The Society of Clinical Psychology task force on empirically validated treatments acknowledges that EMDR is "probably efficacious" for the treatment of nonmilitary posttraumatic stress disorder (Chambless et al., 1997; see also Bisson & Andrew, 2007; Rodenburg et al., 2009; Seidler & Wagner, 2006).

Why, wonder the skeptics, would rapidly moving one's eyes while recalling traumas be therapeutic? Some argue that eye movements serve to relax or distract patients, thus allowing the memory-associated emotions to extinguish (Gunter & Bodner, 2008). Others believe that eye movements in themselves are *not* the therapeutic ingredient. Trials in which people imagined traumatic scenes and tapped a finger, or just stared straight ahead while the therapist's finger wagged, have produced therapeutic results (Devilly, 2003). EMDR does work better than doing nothing, acknowledge the skeptics (Lilienfeld & Arkowitz, 2007b), but many suspect that what is therapeutic is the combination of exposure therapy—repeatedly associating with traumatic memories a safe and reassuring context that provides some emotional distance from the experience—and a robust placebo effect. Had Mesmer's pseudotherapy been compared with no treatment at all, it, too (thanks to the healing power of positive belief), might have been found "probably efficacious," observed Richard McNally (1999).

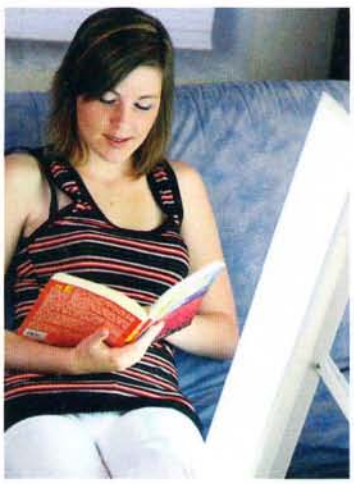
"Studies indicate that EMDR is just as effective with fixed eyes. If that conclusion is right, what's useful in the therapy (chiefly behavioral desensitization) is not new, and what's new is superfluous." -*Harvard Mental Health Letter,* 2002

LIGHT EXPOSURE THERAPY

Have you ever found yourself oversleeping, gaining weight, and feeling lethargic during the dark mornings and overcast days of winter? There likely was a survival advantage to your distant ancestors' slowing down and conserving energy during the dark days of winter. For some people, however, especially women and those living far from the equator, the wintertime

blahs constitute a seasonal pattern for major depressive disorder. To counteract these dark spirits, National Institute of Mental Health researchers the early 1980s had an idea: Give people a timed daily dose of intense light. Sure enough, people reported they felt better.

Was this a bright idea, or another dim-witted example of the placebo effect? Research sheds some light. One study exposed some people with a seasonal pattern in their depression symptoms to 90 minutes of bright light and others to a sham placebo treatment—a hissing "negative ion generator" about which the staff expressed similar enthusiasm (but which was not even turned on). After four weeks, 61 percent of those exposed to morning light had greatly improved, as had 50 percent of those exposed to evening light and 32 percent of those exposed to the placebo (Eastman et al., 1998). Other studies have found that 30 minutes of exposure to 10,000-lux white fluorescent light produced relief for more than half the people receiving morning light therapy (Flory et al., 2010; Terman et al., 1998, 2001). From 20 carefully controlled trials we have a verdict (Golden et al., 2005; Wirz-Justice, 2009): Morning bright light does indeed dim depression symptoms for many of those suffering in a seasonal pattern. Moreover, it does so as effectively as taking antidepressant drugs or undergoing cognitive-behavioral therapy (Lam et al., 2006; Rohan et al., 2007). The effects are clear in brain scans; light therapy sparks activity in a brain region that influences the body's arousal and hormones (Ishida et al., 2005).



BSIP SA/Alamy

Light therapy To counteract winter depression, some people spend time each morning exposed to intense light that mimics natural outdoor light. Light boxes with the appropriate intensity are available from health supply and lighting stores.

Commonalities Among Psychotherapies

72-4 What three elements are shared by all forms of psychotherapy?

Why have studies found little correlation between therapists' training and experience and clients' outcomes? In search of some answers, Jerome Frank (1982), Marvin Goldfried (Goldfried & Padawer, 1982), Hans Strupp (1986), and Bruce Wampold (2001, 2007) have studied the common ingredients of various therapies. They suggest that all therapies offer at least three benefits:

- ***Hope for demoralized people*** People seeking therapy typically feel anxious, depressed, devoid of self-esteem, and incapable of turning things around. What any therapy offers is the expectation that, with commitment from the therapy seeker, things can and will get better. This belief, apart from any therapeutic technique, may function as a placebo, improving morale, creating feelings of self-efficacy, and diminishing symptoms (Prioleau et al., 1983).
- ***A new perspective*** Every therapy also offers people a plausible explanation of their symptoms and an alternative way of looking at themselves or responding to their world. Armed with a believable fresh perspective, they may approach life with a new attitude, open to making changes in their behaviors and their views of themselves.
- ***An empathic, trusting, caring relationship*** To say that therapy outcome is unrelated to training and experience is not to say all *therapists* are equally effective. No matter what therapeutic technique they use, effective therapists are empathic people who seek to understand another's experience; who communicate their care and concern to the client; and who earn the client's trust through respectful listening, reassurance, and advice. Marvin Goldfried and his associates (1998) found these qualities in recorded therapy sessions from 36 recognized master therapists. Some took a

cognitive-behavioral approach, others emphasized psychodynamic teachings. Regardless, the striking finding was how *similar* they were. At key moments, the empathic therapists of both persuasions would help clients evaluate themselves, link one aspect of their life with another, and gain insight into their interactions with others.

The emotional bond between therapist and client—the **therapeutic alliance**—is a key aspect of effective therapy (Klein et al., 2003; Wampold, 2001). One U.S. National Institute of Mental Health depression-treatment study confirmed that the most effective therapists were those who were perceived as most empathic and caring and who established the closest therapeutic bonds with their clients (Blatt et al., 1996). That all therapies offer hope through a fresh perspective offered by a caring person is what also enables paraprofessionals (briefly trained caregivers) to assist so many troubled people so effectively (Christensen & Jacobson, 1994).

These three common elements are also part of what the growing numbers of self-help and support groups offer their members. And they are part of what traditional healers have offered (Jackson, 1992). Healers everywhere—special people to whom others disclose their suffering, whether psychiatrists, witch doctors, or shamans—have listened in order to understand and to empathize, reassure, advise, console, interpret, or explain (Torrey, 1986). Such qualities may explain why people who feel supported by close relationships—who enjoy the fellowship and friendship of caring people—are less likely to need or seek therapy (Frank, 1982; O'Connor & Brown, 1984).

* * *

To recap, people who seek help usually improve. So do many of those who do not undergo psychotherapy, and that is a tribute to our human resourcefulness and our capacity to care for one another. Nevertheless, though the therapist's orientation and experience appear not to matter much, people who receive some psychotherapy usually improve more than those who do not. People with clear-cut, specific problems tend to improve the most.

David Buffington/Getty Images

A caring relationship Effective therapists form a bond of trust with their clients.

therapeutic alliance a bond of trust and mutual understanding between a therapist and client, who work together constructively to overcome the client's problem.

Culture, Gender, and Values in Psychotherapy

72-5 How do culture, gender, and values influence the therapist-client relationship?

All therapies offer hope, and nearly all therapists attempt to enhance their clients' sensitivity, openness, personal responsibility, and sense of purpose (Jensen & Bergin, 1988). But in matters of diversity, therapists differ from one another and may differ from their clients (Delaney et al., 2007; Kelly, 1990).

These differences can become significant when a therapist from one culture or gender meets a client from another. In North America, Europe, and Australia, for example, most therapists reflect their culture's individualism, which often gives priority to personal desires and identity, particularly for men. Clients who are immigrants from Asian countries, where people are mindful of others' expectations, may have trouble relating to therapies that require them to think only of their own well-being. And women seeking therapy who are from a collectivist culture might be doubly discomfited. Such differences help explain minority populations' reluctance to use mental health services and their tendency to prematurely terminate therapy (Chen et al., 2009; Sue, 2006). In one experiment, Asian-American clients matched with counselors who shared their cultural values (rather than mismatched with those who did not) perceived more counselor empathy and felt a stronger alliance with the counselor (Kim et al., 2005). Recognizing that therapists and clients may differ in their values, communication styles, and language, American Psychological Association–accredited therapy training programs now provide training in cultural sensitivity and recruit members of underrepresented cultural groups.

Another area of potential conflict related to values is religion. Highly religious people may prefer and benefit from religiously similar therapists (Masters, 2010; Smith et al., 2007; Wade et al., 2006). They may have trouble establishing an emotional bond with a therapist who does not share their values.

Albert Ellis, who advocated the aggressive rational-emotive behavior therapy (REBT), and Allen Bergin, co-editor of the *Handbook of Psychotherapy and Behavior Change,* illustrated how sharply therapists can differ, and how those differences can affect their view of a healthy person. Ellis (1980) assumed that "no one and nothing is supreme," that "self-gratification" should be encouraged, and that "unequivocal love, commitment, service, and . . . fidelity to any interpersonal commitment, especially marriage, leads to harmful consequences." Bergin (1980) assumed the opposite—that "because God is supreme, humility and the acceptance of divine authority are virtues," that "self-control and committed love and self-sacrifice are to be encouraged," and that "infidelity to any interpersonal commitment, especially marriage, leads to harmful consequences."

Bergin and Ellis disagreed more radically than most therapists on what values are healthiest. In so doing, however, they agreed on a more general point: Psychotherapists' personal beliefs influence their practice. Because clients tend to adopt their therapists' values (Worthington et al., 1996), some psychologists believe therapists should divulge those values more openly. (For those thinking about seeking therapy, Close-up: A Consumer's Guide to Psychotherapists offers some tips on when to seek help and how to start searching for a therapist who shares your perspective and goals.)

Close-up

A Consumer's Guide to Psychotherapists

72-6 What should a person look for when selecting a therapist?

Life for everyone is marked by a mix of serenity and stress, blessing and bereavement, good moods and bad. So, when should we seek a mental health professional's help? The American Psychological Association offers these common trouble signals:

- Feelings of hopelessness
- Deep and lasting depression
- Self-destructive behavior, such as substance use disorder
- Disruptive fears
- Sudden mood shifts
- Thoughts of suicide
- Compulsive rituals, such as hand washing
- Hearing voices or seeing things that others don't experience

In looking for a therapist, you may want to have a preliminary consultation with two or three. High school counseling offices are generally good starting points, and may offer some free services. You can describe your problem and learn each therapist's treatment approach. You can ask questions about the therapist's values, credentials (**TABLE 72.1**), and fees. And you can assess your own feelings about each of them. The emotional bond between therapist and client is perhaps the most important factor in effective therapy.

TABLE 72.1
Therapists and Their Training

Type	Description
Clinical psychologists	Most are psychologists with a Ph.D. (includes research training) or Psy.D. (focuses on therapy) supplemented by a supervised internship and, often, postdoctoral training. About half work in agencies and institutions, half in private practice.
Psychiatrists	Psychiatrists are physicians who specialize in the treatment of psychological disorders. Not all psychiatrists have had extensive training in psychotherapy, but as M.D.s or D.O.s they can prescribe medications. Thus, they tend to see those with the most serious problems. Many have their own private practice.
Clinical or psychiatric social workers	A two-year master of social work graduate program plus postgraduate supervision prepares some social workers to offer psychotherapy, mostly to people with everyday personal and family problems. About half have earned the National Association of Social Workers' designation of clinical social worker.
Counselors	Marriage and family counselors specialize in problems arising from family relations. Clergy provide counseling to countless people. Abuse counselors work with substance abusers and with spouse and child abusers and their victims. Mental health and other counselors may be required to have a two-year master's degree.

Preventing Psychological Disorders

72-7 What is the rationale for preventive mental health programs?

We have seen that lifestyle change can help *reverse* some of the symptoms of psychological disorders. Might such change also *prevent* some disorders by building individuals' **resilience**—an ability to cope with stress and recover from adversity? Faced with unforeseen trauma, most adults exhibit resilience. This was true of New Yorkers in the aftermath of the September 11 terrorist attacks, especially those who enjoyed supportive close relationships and who had not recently experienced other stressful events (Bonanno et al., 2007). More than 9 in 10 New Yorkers, although stunned and grief-stricken by 9/11, did *not* have a dysfunctional stress reaction. By the following January, the stress symptoms of those who did were mostly gone (Person et al., 2006). Even in groups of combat-stressed veterans and political rebels who have survived dozens of episodes of torture, most do not later exhibit posttraumatic stress disorder (Mineka & Zinbarg, 1996).

resilience the personal strength that helps most people cope with stress and recover from adversity and even trauma.

Psychotherapies and biomedical therapies tend to locate the cause of psychological disorders within the person with the disorder. We infer that people who act cruelly must be cruel and that people who act "crazy" must be "sick." We attach labels to such people, thereby distinguishing them from "normal" folks. It follows, then, that we try to treat "abnormal" people by giving them insight into their problems, by changing their thinking, by helping them gain control with drugs.

There is an alternative viewpoint: We could interpret many psychological disorders as understandable responses to a disturbing and stressful society. According to this view, it is not just the person who needs treatment, but also the person's social context. Better to prevent a problem by reforming a sick situation and by developing people's coping competencies than to wait for a problem to arise and then treat it.

A story about the rescue of a drowning person from a rushing river illustrates this viewpoint: Having successfully administered first aid to the first victim, the rescuer spots another struggling person and pulls her out, too. After a half-dozen repetitions, the rescuer suddenly turns and starts running away while the river sweeps yet another floundering person into view. "Aren't you going to rescue that fellow?" asks a bystander. "Heck no," the rescuer replies. "I'm going upstream to find out what's pushing all these people in."

"It is better to prevent than to cure." -Peruvian folk wisdom

Preventive mental health is upstream work. It seeks to prevent psychological casualties by identifying and alleviating the conditions that cause them. As George Albee (1986) pointed out, there is abundant evidence that poverty, meaningless work, constant criticism, unemployment, racism, sexism, and heterosexism undermine people's sense of competence, personal control, and self-esteem. Such stresses increase their risk of depression, alcohol use disorder, and suicide.

"Mental disorders arise from physical ones, and likewise physical disorders arise from mental ones." -*The Mahabharata*, 200 B.C.E.

We who care about preventing psychological casualties should, Albee contended, support programs that alleviate these demoralizing situations. We eliminated smallpox not by treating the afflicted but by inoculating the unafflicted. We conquered yellow fever by controlling mosquitoes. Preventing psychological problems means empowering those who feel helpless, changing environments that breed loneliness, renewing the disintegrating family, promoting communication training for couples, and bolstering parents' and teachers' skills. "Everything aimed at improving the human condition, at making life more fulfilling and meaningful, may be considered part of primary prevention of mental or emotional disturbance" (Kessler & Albee, 1975, p. 557). That includes the cognitive training that promotes positive thinking in children at risk for depression (Brunwasser et al., 2009; Gillham et al., 2006; Stice et al., 2009). A 2009 National Research Council and Institute of Medicine report—*Preventing Mental, Emotional, and Behavioral Disorders Among Young People*—offers encouragement. It documents that intervention efforts often based on cognitive-behavioral therapy principles significantly boost child and adolescent flourishing. Through such preventive efforts and healthy lifestyles, fewer of us will fall into the rushing river of psychological disorders.

Before You Move On

► ASK YOURSELF

Can you think of a specific way that improving the environment in your own community might prevent some psychological disorders among its residents?

► TEST YOURSELF

What is the difference between preventive mental health and psychological or biomedical therapy?

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

Module 72 Review

72-1 Does psychotherapy work? Who decides?

- Clients' and therapists' positive testimonials cannot prove that therapy is actually effective, and the placebo effect and *regression toward the mean* (the tendency for extreme or unusual scores to fall back toward their average) make it difficult to judge whether improvement occurred because of the treatment.
- Using *meta-analyses* to statistically combine the results of hundreds of randomized psychotherapy outcome studies, researchers have found that those not undergoing treatment often improve, but those undergoing psychotherapy are more likely to improve more quickly, and with less chance of relapse.

72-2 Are some psychotherapies more effective than others for specific disorders?

- No one type of psychotherapy is generally superior to all others. Therapy is most effective for those with clear-cut, specific problems.
- Some therapies—such as behavior conditioning for treating phobias and compulsions—are more effective for specific disorders.
- Psychodynamic therapy helped treat depression and anxiety, and cognitive and cognitive-behavioral therapies have been effective in coping with anxiety, obsessive-compulsive disorder, posttraumatic stress disorder, and depression.
- *Evidence-based practice* integrates the best available research with clinicians' expertise and patients' characteristics, preferences, and circumstances.

72-3 How do alternative therapies fare under scientific scrutiny?

- Controlled research has found some benefits of eye movement desensitization and reprocessing (EMDR) therapy for PTSD, though possibly for reasons unrelated to eye movements.
- Light exposure therapy does seem to relieve depression symptoms for those with a seasonal pattern of major depressive disorder by activating a brain region that influences arousal and hormones.

72-4 What three elements are shared by all forms of psychotherapy?

- All psychotherapies offer new hope for demoralized people; a fresh perspective; and (if the therapist is effective) an empathic, trusting, and caring relationship.
- The emotional bond of trust and understanding between therapist and client—the *therapeutic alliance*—is an important element in effective therapy.

72-5 How do culture, gender, and values influence the therapist-client relationship?

- Therapists differ in the values that influence their goals in therapy and their views of progress. These differences may create problems if therapists and clients differ in their cultural, gender, or religious perspectives.

72-6 What should a person look for when selecting a therapist?

- A person seeking therapy may want to ask about the therapist's treatment approach, values, credentials, and fees.
- An important consideration is whether the therapy seeker feels comfortable and able to establish a bond with the therapist.

72-7 What is the rationale for preventive mental health programs?

- Preventive mental health programs are based on the idea that many psychological disorders could be prevented by changing oppressive, esteem-destroying environments into more benevolent, nurturing environments that foster growth, self-confidence, and *resilience*.

Multiple-Choice Questions

1. Which of the following does the text's author call psychology's most powerful tool for sorting reality from wishful thinking?
   a. ESP or "psychic powers"
   b. Regression toward the mean
   c. Client perception
   d. Control group
   e. Placebo effect

2. Which of the following best describes meta-analysis?
   a. Evidenced-based practice
   b. A treatment versus no treatment group
   c. A tendency for smaller scores to move toward the average
   d. Regressing from unusual to usual
   e. A way to combine the results of lots of studies

3. Which of the following is the best phrase for a bond of trust and mutual understanding between a therapist and client who are working to overcome the client's problem?
   a. Therapeutic alliance
   b. EMDR
   c. Evidence-based practice
   d. Meta-analysis
   e. Outcome research

Practice FRQs

1. Explain the three sides of evidence-based clinical decision making.

Answer

1 point: Using the best available research evidence.

1 point: Clinical expertise.

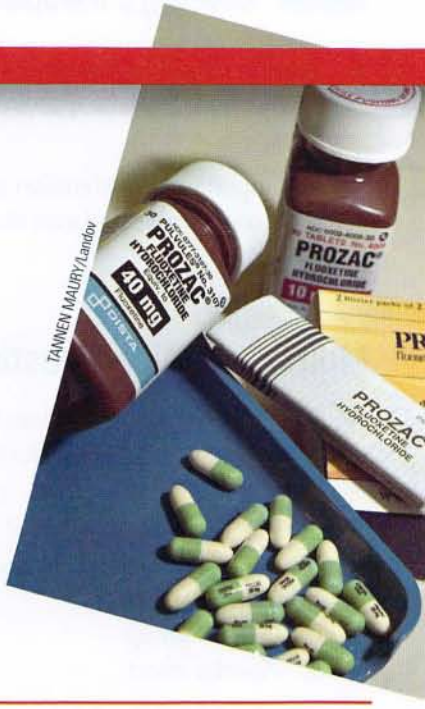
1 point: Using a patient's values, preferences, and circumstances.

2. Psychotherapies have many common ingredients. Identify three commonly agreed-upon benefits of psychotherapies.

(3 points)

Module 73

The Biomedical Therapies



TANNEN MAURY/Landov

Module Learning Objectives

73-1 Identify and describe the drug therapies, and explain how double-blind studies help researchers evaluate a drug's effectiveness.

73-2 Describe the use of brain stimulation techniques and psychosurgery in treating specific disorders.

73-3 Describe how, by taking care of themselves with a healthy lifestyle, people might find some relief from depression, and explain how this reflects our being biopsychosocial systems.

Psychotherapy is one way to treat psychological disorders. The other, often used with serious disorders, is biomedical therapy—physically changing the brain's functioning by altering its chemistry with drugs, or affecting its circuitry with electroconvulsive shock, magnetic impulses, or psychosurgery. Primary care providers prescribe most drugs for anxiety and depression, followed by psychiatrists and, in some states, psychologists.

psychopharmacology the study of the effects of drugs on mind and behavior.

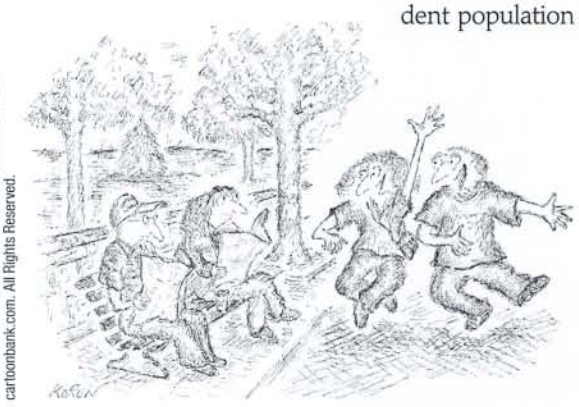
Drug Therapies

73-1 What are the drug therapies? How do double-blind studies help researchers evaluate a drug's effectiveness?

Drug or placebo effect? For many people, depression lifts while taking an antidepressant drug. But people given a placebo may experience the same effect. Double-blind clinical trials suggest that, especially for those with severe depression, antidepressant drugs do have at least a modest clinical effect.

By far the most widely used biomedical treatments today are the drug therapies. Since the 1950s, discoveries in **psychopharmacology** (the study of drug effects on mind and behavior) have revolutionized the treatment of people with severe disorders, liberating hundreds of thousands from hospital confinement. Thanks to drug therapy—and to efforts to minimize involuntary hospitalization and to support people through community mental health programs—the resident population of mental hospitals is a small fraction of what it was a half-century ago. For some unable to care for themselves, however, release from hospitals has meant homelessness, not liberation.

Almost any new treatment, including drug therapy, is greeted by an initial wave of enthusiasm as many people apparently improve. But that enthusiasm often diminishes after researchers subtract the rates of (1) normal recovery among untreated persons and (2) recovery due to the placebo effect, which arises from the positive expectations of patients and mental health workers alike. So, to evaluate the effectiveness of any new drug, researchers give half the patients the drug, and the other half a similar-appearing placebo. Because neither the staff nor the patients know who gets which, this is called a *double-blind procedure*. The good news: In double-blind studies, some drugs have proven useful.



"Our psychopharmacologist is a genius."

Antipsychotic Drops

The revolution in drug therapy for psychological disorders began with the accidental discovery that certain drugs, used for other medical purposes, calmed patients with *psychoses* (disorders in which hallucinations or delusions indicate some loss of contact with reality). These **antipsychotic drugs,** such as chlorpromazine (sold as Thorazine), dampened responsiveness to irrelevant stimuli. Thus, they provided the most help to patients experiencing positive symptoms of schizophrenia, such as auditory hallucinations and paranoia (Lehman et al., 1998; Lenzenweger et al., 1989).

The molecules of most conventional antipsychotic drugs are antagonists; they are similar enough to molecules of the neurotransmitter dopamine to occupy its receptor sites and block its activity. This finding reinforces the idea that an overactive dopamine system contributes to schizophrenia.

Antipsychotics also have powerful side effects. Some produce sluggishness, tremors, and twitches similar to those of Parkinson's disease (Kaplan & Saddock, 1989). Long-term use of antipsychotics can produce *tardive dyskinesia,* with involuntary movements of the facial muscles (such as grimacing), tongue, and limbs. Although not more effective in controlling schizophrenia symptoms, many of the newer-generation antipsychotics, such as risperidone (Risperdal) and olanzapine (Zyprexa), have fewer of these effects. These drugs may, however, increase the risk of obesity and diabetes (Buchanan et al., 2010; Tiihonen et al., 2009).

Antipsychotics, combined with life-skills programs and family support, have given new hope to many people with schizophrenia (Guo, 2010). Hundreds of thousands of patients have left the wards of mental hospitals and returned to work and to near-normal lives (Leucht et al., 2003).

AP® Exam Tip

The discussion of drug therapies is a great opportunity for you to review information about neurotransmitters and brain function. See Unit III if you need to brush up on these topics.

FYI

Perhaps you can guess an occasional side effect of L-dopa, a drug that raises dopamine levels for Parkinson's patients: hallucinations.

Antianxiety Drugs

Like alcohol, **antianxiety drugs,** such as Xanax or Ativan, depress central nervous system activity (and so should not be used in combination with alcohol). Antianxiety drugs are often used in combination with psychological therapy. One antianxiety drug, the antibiotic D-cycloserine, acts upon a receptor that, in combination with behavioral treatments, facilitates the extinction of learned fears. Experiments indicate that the drug enhances the benefits of exposure therapy and helps relieve the symptoms of posttraumatic stress disorder and obsessive-compulsive disorder (Davis, 2005; Kushner et al., 2007).

A criticism sometimes made of the behavior therapies—that they reduce symptoms without resolving underlying problems—is also made of drug therapies. Unlike the behavior therapies, however, these substances may be used as an ongoing treatment. "Popping a Xanax" at the first sign of tension can create a learned response; the immediate relief reinforces a person's tendency to take drugs when anxious. Antianxiety drugs can also be addicting. After heavy use, people who stop taking them may experience increased anxiety, insomnia, and other withdrawal symptoms.

Over the dozen years at the end of the twentieth century, the rate of outpatient treatment for anxiety disorders, obsessive-compulsive disorder, and posttraumatic stress disorder nearly doubled. The proportion of psychiatric patients receiving medication during that time increased from 52 to 70 percent (Olfson et al., 2004). And the new standard drug treatment for anxiety disorders? Antidepressants.

antipsychotic drugs drugs used to treat schizophrenia and other forms of severe thought disorder.

antianxiety drugs drugs used to control anxiety and agitation.

antidepressant drugs drugs used to treat depression, anxiety disorders, obsessive-compulsive disorder, and posttraumatic stress disorder. (Several widely used antidepressant drugs are *selective serotonin reuptake inhibitors—SSRIs.)*

Antidepressant Drugs

The **antidepressants** were named for their ability to lift people up from a state of depression, and this was their main use until recently. The label is a bit of a misnomer now that these drugs are increasingly being used to successfully treat anxiety disorders, obsessive-compulsive disorder, and posttraumatic stress disorder. These drugs are agonists; they work by increasing the availability of certain neurotransmitters, such as norepinephrine or serotonin, which

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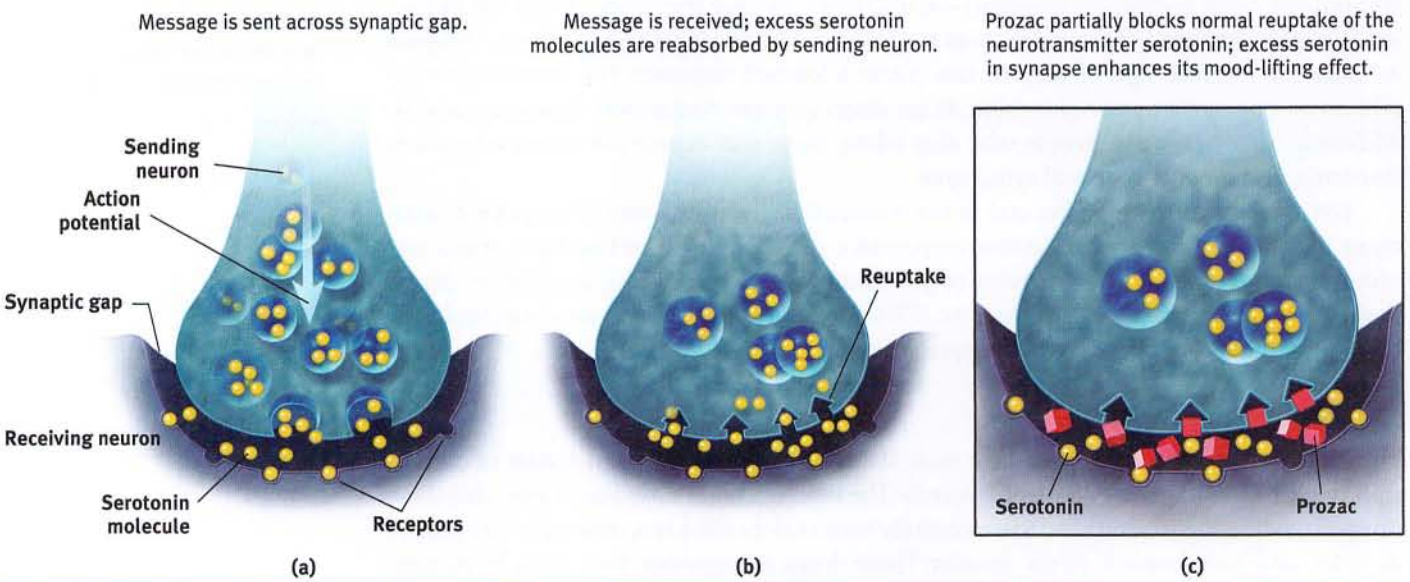
elevate arousal and mood and appear scarce when a person experiences feelings of depression or anxiety. Fluoxetine, which tens of millions of users worldwide have known as Prozac, falls into this category of drugs. The most commonly prescribed drugs in this group, including Prozac and its cousins Zoloft and Paxil, work by blocking the reabsorption and removal of serotonin from synapses (**FIGURE 73.1**). Given their use in treating disorders other than depression—from anxiety to strokes—this group of drugs is most often called *SSRIs (selective serotonin reuptake inhibitors)* rather than antidepressants (Kramer, 2011). Some of the older antidepressant drugs work by blocking the reabsorption or breakdown of both norepinephrine and serotonin. Though effective, these dual-action drugs have more potential side effects, such as dry mouth, weight gain, hypertension, or dizzy spells (Anderson, 2000; Mulrow, 1999). Administering them by means of a patch, bypassing the intestines and liver, helps reduce such side effects (Bodkin & Amsterdam, 2002).

After the introduction of SSRI drugs, the percentage of patients receiving medication for depression jumped dramatically, from 70 percent in 1987, the year before SSRIs were introduced, to 89 percent in 2001 (Olfson et al., 2003; Stafford et al., 2001). From 1996 to 2005, the number of Americans prescribed antidepressant drugs doubled, from 13 to 27 million (Olfson & Marcus, 2009). Between 2002 and 2007 in Australia, antidepressant drug use increased 41 percent (Hollingworth et al., 2010).

Be advised: Patients with depression who begin taking antidepressants do not wake up the next day singing "It's a beautiful day"! Although the drugs begin to influence neurotransmission within hours, their full psychological effect often requires four weeks. One possible reason for the delay is that increased serotonin promotes *neurogenesis*—the birth of new brain cells, perhaps reversing stress-induced loss of neurons (Becker & Wojtowicz, 2007; Jacobs, 2004).

Antidepressant drugs are not the only way to give the body a lift. Aerobic exercise, which calms people who feel anxious and energizes those who feel depressed, does about as much good for some people with mild to moderate depression, and has additional positive side effects (more on this topic later in this module). Cognitive therapy, by helping people reverse their habitual negative thinking style, can boost the drug-aided relief from depression and reduce the post-treatment risk of relapse (Hollon et al., 2002; Keller et al., 2000; Vittengl et al., 2007). Better yet, some studies suggest, is to attack depression (and anxiety) from both below and above (Cuijpers et al., 2010; Walkup et al., 2008). Use antidepressant drugs (which work, bottom-up, on the emotion-forming limbic system) in conjunction with cognitive-behavioral therapy (which works top-down, starting with changed frontal lobe activity).

Figure 73.1
Biology of antidepressants
Shown here is the action of Prozac, which partially blocks the reuptake of serotonin.



Researchers generally agree that people with depression often improve after a month on antidepressants. But after allowing for natural recovery and the placebo effect, how big is the drug effect? Not big, report Irving Kirsch and his colleagues (1998, 2002, 2010). Their analyses of double-blind clinical trials indicate that the placebo effect accounted for about 75 percent of the active drug's effect. In a follow-up review that included unpublished clinical trials, the antidepressant drug effect was again modest (Kirsch et al., 2008). The placebo effect was less for those with severe depression, which made the added benefit of the drug somewhat greater for them. "Given these results, there seems little reason to prescribe antidepressant medication to any but the most severely depressed patients, unless alternative treatments have failed," Kirsch concluded (BBC, 2008). A newer analysis confirms that the antidepressant benefit compared with placebos is "minimal or nonexistent, on average, in patients with mild or moderate symptoms." For those folks, aerobic exercise or psychotherapy is often effective. But among patients with "very severe" depression, the medication advantage becomes "substantial" (Fournier et al., 2010).

"If this doesn't help you don't worry, it's a placebo."

"No twisted thought without a twisted molecule." -ATTRIBUTED TO PSYCHOLOGIST RALPH GERARD

Mood-Stabilizing Medications

In addition to antipsychotic, antianxiety, and antidepressant drugs, psychiatrists have *mood-stabilizing drugs* in their arsenal. For those suffering the emotional highs and lows of bipolar disorder, the simple salt *lithium* can be an effective mood stabilizer. Australian physician John Cade discovered this in the 1940s when he administered lithium to a patient with severe mania and the patient became perfectly well in less than a week (Snyder, 1986). After suffering mood swings for years, about 7 in 10 people with bipolar disorder benefit from a long-term daily dose of this cheap salt, which helps prevent or ease manic episodes and, to a lesser extent, lifts depression (Solomon et al., 1995). It also protects neural health, thus reducing bipolar patients' vulnerability to significant cognitive decline (Kessing et al., 2010).

Lithium also reduces bipolar patients' risk of suicide—to about one-sixth of bipolar patients not taking lithium (Tondo et al., 1997). Lithium amounts in drinking water have also correlated with lower suicide rates (across 18 Japanese cities and towns) and lower crime rates (across 27 Texas counties) (Ohgami et al., 2009; Schrauzer & Shrestha, 1990, 2010; Terao et al., 2010). Although we do not fully understand why, lithium works. And so does Depakote, a drug originally used to treat epilepsy and more recently found effective in the control of manic episodes associated with bipolar disorder.

"Lithium prevents my seductive but disastrous highs, diminishes my depressions, clears out the wool and webbing from my disordered thinking, slows me down, gentles me out, keeps me from ruining my career and relationships, keeps me out of a hospital, alive, and makes psychotherapy possible." -KAY REDFIELD JAMISON, *AN UNQUIET MIND*, 1995

Brain Stimulation

73-2 How are brain stimulation and psychosurgery used in treating specific disorders?

Electroconvulsive Therapy

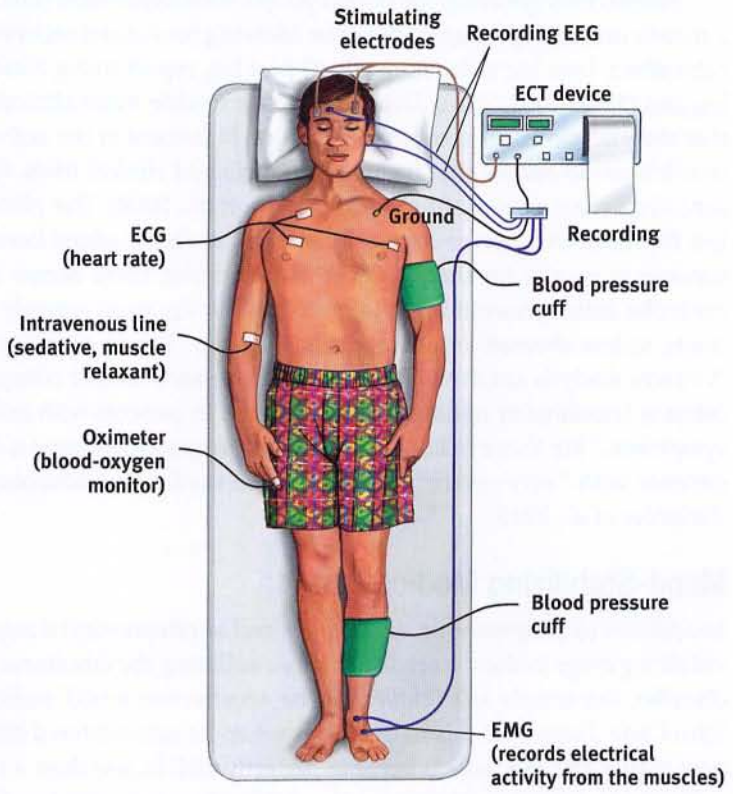
A more controversial brain manipulation occurs through shock treatment, or **electroconvulsive therapy (ECT).** When ECT was first introduced in 1938, the wide-awake patient was strapped to a table and jolted with roughly 100 volts of electricity to the brain, producing racking convulsions and brief unconsciousness. ECT therefore gained a barbaric image, one that lingers. Today, however, the patient receives a general anesthetic and a muscle relaxant (to prevent injury from seizures) before a psychiatrist delivers 30 to 60 seconds of electrical current (**FIGURE 73.2** on the next page). Within 30 minutes, the patient awakens and remembers nothing of the treatment or of the preceding hours. After three such sessions each week for two to four weeks, 80 percent or more of people receiving ECT improve markedly, showing some memory loss for the treatment period but no discernible brain damage.

electroconvulsive therapy (ECT) a biomedical therapy for severely depressed patients in which a brief electric current is sent through the brain of an anesthetized patient.

FYI

The medical use of electricity is an ancient practice. Physicians treated the Roman Emperor Claudius (10 B.C.E.–54 C.E.) for headaches by pressing electric eels to his temples.

Figure 73.2
Electroconvulsive therapy
Although controversial, ECT is often an effective treatment for depression that does not respond to drug therapy. "Electroconvulsive" is no longer accurate because patients are now given a drug that prevents injurious seizures.




Rick Friedman/Corbis

ECT proponent In her book, *Shock: The Healing Power of Electroconvulsive Therapy* (2006), Kitty Dukakis writes, "I used to . . . be unable to shake the dread even when I was feeling good, because I knew the bad feelings would return. ECT has wiped away that foreboding. It has given me a sense of control, of hope."

Study after study confirms that ECT is an effective treatment for severe depression in "treatment-resistant" patients who have not responded to drug therapy (Bailine et al., 2010; Fink, 2009; UK ECT Review Group, 2003). An editorial in the *Journal of the American Medical Association* concluded that "the results of ECT in treating severe depression are among the most positive treatment effects in all of medicine" (Glass, 2001).

How does ECT alleviate severe depression? After more than 70 years, no one knows for sure. One recipient likened ECT to the smallpox vaccine, which was saving lives before we knew how it worked. Others think of it as rebooting their cerebral computer. But what makes it therapeutic? Perhaps the shock-induced seizures calm neural centers where overactivity produces depression. ECT, like antidepressant drugs and exercise, also appears to boost the production of new brain cells (Bolwig & Madsen, 2007).

Skeptics have raised one other possible explanation for how ECT works: as a placebo effect. Most ECT studies have failed to contain a control condition in which people are randomly assigned to receive the same general anesthesia and simulated ECT without the shock. When given this placebo treatment, note John Read and Richard Bentall (2010), the positive expectation is therapeutic, though a Food and Drug Administration (2011) research review concludes that ECT is more effective than a placebo, especially in the short run.

ECT is now administered with briefer pulses, sometimes only to the brain's right side and with less memory disruption (HMHL, 2007). Yet no matter how impressive the results, the idea of electrically shocking people still strikes many as barbaric, especially given our ignorance about why ECT works. Moreover, about 4 in 10 ECT-treated patients relapse into depression within six months (Kellner et al., 2006). Nevertheless, in the minds of many psychiatrists and patients, ECT is a lesser evil than severe depression's misery, anguish, and risk of suicide. As research psychologist Norman Endler (1982) reported after ECT alleviated his deep depression, "A miracle had happened in two weeks."

Alternative Neurostimulation Therapies

Two other neural stimulation techniques—magnetic stimulation and deep-brain stimulation—are raising hopes for gentler alternatives that jump-start neural circuits in the depressed brain.

MAGNETIC STIMULATION

Depressed moods seem to improve when repeated pulses surge through a magnetic coil held close to a person's skull (**FIGURE 73.3**). The painless procedure—called **repetitive transcranial magnetic stimulation (rTMS)**—is performed on wide-awake patients over several weeks. Unlike ECT, the rTMS procedure produces no seizures, memory loss, or other serious side effects. (Headaches can result.)

repetitive transcranial magnetic stimulation (rTMS) the application of repeated pulses of magnetic energy to the brain; used to stimulate or suppress brain activity.

Initial studies have found "modest" positive benefits of rTMS (Daskalakis et al., 2008; George et al., 2010; López-Ibor et al., 2008). How it works is unclear. One possible explanation is that the stimulation energizes the brain's left frontal lobe, which is relatively inactive during depression (Helmuth, 2001). Repeated stimulation may cause nerve cells to form new functioning circuits through the process of long-term potentiation. (See Module 32 for more details on long-term potentiation.)

FYI

A meta-analysis of 17 clinical experiments found that one other stimulation procedure alleviates depression: massage therapy (Hou et al., 2010).

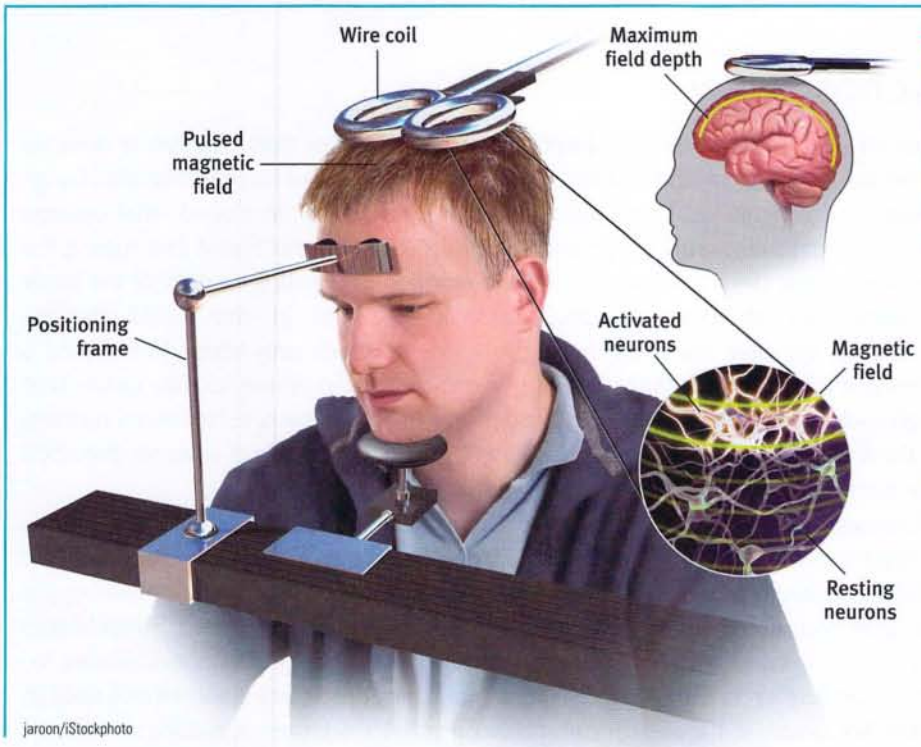


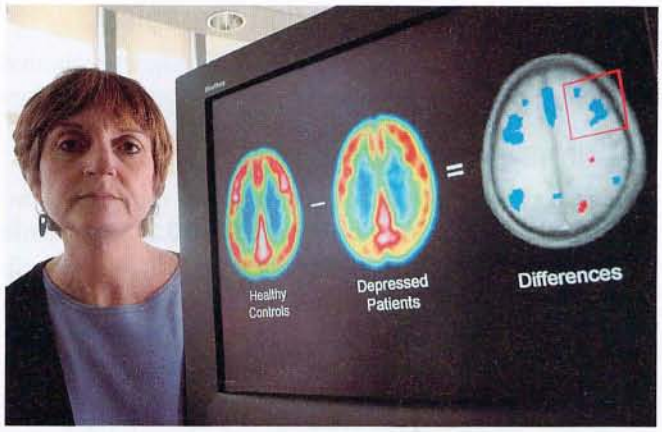
Figure 73.3

Magnets for the mind Repetitive transcranial magnetic stimulation (rTMS) sends a painless magnetic field through the skull to the surface of the cortex. Pulses can be used to stimulate or dampen activity in various cortical areas. (From George, 2003.)

DEEP-BRAIN STIMULATION

Other patients whose depression has resisted both drugs that flood the body and ECT that jolts at least half the brain have benefited from an experimental treatment pinpointed at a depression center in the brain. Neuroscientist Helen Mayberg and her colleagues (2005, 2006, 2007, 2009) have been focusing on a neural hub that bridges the thinking frontal lobes to the limbic system. This area, which is overactive in the brain of a depressed or temporarily sad person, calms when treated by ECT or antidepressants. To experimentally excite neurons that inhibit this negative emotion-feeding activity, Mayberg drew upon the deep-brain stimulation technology sometimes used to treat Parkinson's tremors. Among an initial 20 patients receiving implanted electrodes and a pacemaker stimulator, 12 experienced relief, which was sustained over three to six years of follow-up (Kennedy et al., 2011).

A depression switch? By comparing the brains of patients with and without depression, researcher Helen Mayberg identified a brain area that appears active in people who are depressed or sad, and whose activity may be calmed by deep-brain stimulation.



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psychosurgery surgery that removes or destroys brain tissue in an effort to change behavior.

lobotomy a psychosurgical procedure once used to calm uncontrollably emotional or violent patients. The procedure cut the nerves connecting the frontal lobes to the emotion-controlling centers of the inner brain.

Some felt suddenly more aware and became more talkative and engaged; others improved only slightly if at all. Future research will explore whether Mayberg has discovered a switch that can lift depression. Other researchers are following up on reports that deep-brain stimulation can offer relief to people with obsessive-compulsive disorder (Rabins et al., 2009).

New York Times Co./Getty Images

Failed lobotomy This 1940 photo shows Rosemary Kennedy (center) at age 22 with brother (and future U.S. president) John and sister Jean. A year later her father, on medical advice, approved a lobotomy that was promised to control her reportedly violent mood swings. The procedure left her confined to a hospital with an infantile mentality until her death in 2005 at age 86.

Psychosurgery

Because its effects are irreversible, **psychosurgery**—surgery that removes or destroys brain tissue—is the most drastic and the least-used biomedical intervention for changing behavior. In the 1930s, Portuguese physician Egas Moniz developed what became the best-known psychosurgical operation: the **lobotomy.** Moniz found that cutting the nerves connecting the frontal lobes with the emotion-controlling centers of the inner brain calmed uncontrollably emotional and violent patients. In what would later become a crude but easy and inexpensive procedure that took only about 10 minutes, a neurosurgeon would shock the patient into a coma, hammer an icepick-like instrument through each eye socket into the brain, and then wiggle it to sever connections running up to the frontal lobes. Between 1936 and 1954, tens of thousands of severely disturbed people were "lobotomized" (Valenstein, 1986).

Although the intention was simply to disconnect emotion from thought, a lobotomy's effect was often more drastic: It usually decreased the person's misery or tension, but also produced a permanently lethargic, immature, uncreative person. During the 1950s, after some 35,000 people had been lobotomized in the United States alone, calming drugs became available and psychosurgery was largely abandoned. Today, lobotomies are history. But more precise, microscale psychosurgery is sometimes used in extreme cases. For example, if a patient suffers uncontrollable seizures, surgeons can deactivate the specific nerve clusters that cause or transmit the convulsions. MRI-guided precision surgery is also occasionally done to cut the circuits involved in severe obsessive-compulsive disorder (Carey, 2009, 2011; Sachdev & Sachdev, 1997). Because these procedures are irreversible, they are controversial and neurosurgeons perform them only as a last resort.

Therapeutic Lifestyle Change

73-3 How, by taking care of themselves with a healthy lifestyle, might people find some relief from depression, and how does this reflect our being biopsychosocial systems?

The effectiveness of the biomedical therapies reminds us of a fundamental lesson: We find it convenient to talk of separate psychological and biological influences, but everything psychological is also biological (**FIGURE 73.4**). Every thought and feeling depends on the

functioning brain. Every creative idea, every moment of joy or anger, every period of depression emerges from the electrochemical activity of the living brain. The influence is two-way: When psychotherapy relieves obsessive-compulsive behavior, PET scans reveal a calmer brain (Schwartz et al., 1996).

Anxiety disorders, obsessive-compulsive disorder, posttraumatic stress disorder, major depression, bipolar disorder, and schizophrenia are all biological events. As we have seen over and again, *a human being is an integrated biopsychosocial system.* For years, we have considered the health of our bodies and minds separately. That neat separation no longer seems valid. Stress affects body chemistry and health. And chemical imbalances, whatever their cause, can produce schizophrenia, depression, and other mental disorders.

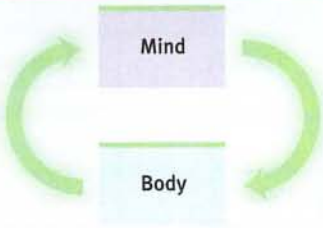

Figure 73.4
Mind-body interaction The biomedical therapies assume that mind and body are a unit: Affect one and you will affect the other.

That lesson is being applied by Stephen Ilardi (2009) in training seminars promoting *therapeutic lifestyle change.* Human brains and bodies were designed for physical activity and social engagement, they note. Our ancestors hunted, gathered, and built in groups, with little evidence of disabling depression. Indeed, those whose way of life entails strenuous physical activity, strong community ties, sunlight exposure, and plenty of sleep (think of foraging bands in Papua New Guinea, or Amish farming communities in North America) rarely experience depression. For both children and adults, outdoor activity in natural environments—perhaps a walk in the woods—reduces stress and promotes health (NEEF, 2011; Phillips, 2011). "Simply put: humans were never designed for the sedentary, disengaged, socially isolated, poorly nourished, sleep-deprived pace of twenty-first-century American life."

The Ilardi team was also impressed by research showing that regular aerobic exercise and a complete night's sleep boost mood and energy. So they invited small groups of people with depression to undergo a 12-week training program with the following goals:

- *Aerobic exercise,* 30 minutes a day, at least 3 times weekly (increasing fitness and vitality, stimulating endorphins)
- *Adequate sleep,* with a goal of 7 to 8 hours a night (increasing energy and alertness, boosting immunity)
- *Light exposure,* at least 30 minutes each morning with a light box (amplifying arousal, influencing hormones)
- *Social connection,* with less alone time and at least two meaningful social engagements weekly (satisfying the human need to belong)
- *Antirumination,* by identifying and redirecting negative thoughts (enhancing positive thinking)
- *Nutritional supplements,* including a daily fish oil supplement with omega-3 fatty acids (supporting healthy brain functioning)


sturti/Getty Images

Healthier lifestyles Researchers suggest that therapeutic lifestyle change can be an effective antidote for people with depression.The changes include managing sleep time, spending more time outdoors (or with a light box), getting more exercise, and developing more social connections.

In one study of 74 people, 77 percent of those who completed the program experienced relief from depressive symptoms, compared with 19 percent in those assigned to a treatment-as-usual control condition. Future research will seek to replicate this striking result of lifestyle change, and also to identify which of the treatment components (additively or in some combination) produce the therapeutic effect. In the meantime, there seems little reason to doubt the truth of the Latin adage, *Mens sana in corpore sano:* "A healthy mind in a healthy body."

TABLE 73.1 on the next page summarizes some aspects of the biomedical therapies we've discussed.

Table 73.1 Comparing Biomedical Therapies

Therapy	Presumed Problem	Therapy Aim	Therapy Technique
Drug therapies	Neurotransmitter malfunction	Control symptoms of psychological disorders.	Alter brain chemistry through drugs.
Brain stimulation	Severe, "treatment-resistant" depression	Alleviate depression that is unresponsive to drug therapy.	Stimulate brain through electroconvulsive shock, magnetic impulses, or deep-brain stimulation.
Psychosurgery	Brain malfunction	Relieve severe disorders.	Remove or destroy brain tissue.
Therapeutic lifestyle change	Stress and unhealthy lifestyle	Restore healthy biological state.	Alter lifestyle through adequate exercise, sleep, and other changes.

Before You Move On

► ASK YOURSELF

If a troubled friend asked, how would you summarize the available biomedical therapies?

► TEST YOURSELF

How do researchers evaluate the effectiveness of particular drug therapies?

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

Module 73 Review

73-1 What are the drug therapies? How do double-blind studies help researchers evaluate a drug's effectiveness?

- *Psychopharmacology,* the study of drug effects on mind and behavior, has helped make drug therapy the most widely used biomedical therapy.
- *Antipsychotic drugs,* used in treating schizophrenia, block dopamine activity. Side effects may include tardive dyskinesia (with involuntary movements of facial muscles, tongue, and limbs) or increased risk of obesity and diabetes.
- *Antianxiety drugs,* which depress central nervous system activity, are used to treat anxiety disorders, obsessive-compulsive disorder, and posttraumatic stress disorder. These drugs can be physically and psychologically addictive.
- *Antidepressant drugs,* which increase the availability of serotonin and norepinephrine, are used for depression, with modest effectiveness beyond that of placebo drugs. The antidepressants known as selective serotonin reuptake inhibitors (SSRIs) are now used to treat other disorders, including strokes, anxiety disorders, obsessive-compulsive disorder, and posttraumatic stress disorder.
- Lithium and Depakote are mood stabilizers prescribed for those with bipolar disorder.
- Studies may use a double-blind procedure to avoid the placebo effect and researchers' bias.

73-2 How are brain stimulation and psychosurgery used in treating specific disorders?

- *Electroconvulsive therapy (ECT),* in which a brief electric current is sent through the brain of an anesthetized patient, is an effective treatment for severely depressed people who have not responded to other therapy.
- Newer alternative treatments for depression include *repetitive transcranial magnetic stimulation (rTMS)* and, in preliminary clinical experiments, deep-brain stimulation that calms an overactive brain region linked with negative emotions.
- *Psychosurgery* removes or destroys brain tissue in hopes of modifying behavior.
  - Radical psychosurgical procedures such as the *lobotomy* were once popular, but neurosurgeons now rarely perform brain surgery to change behavior or moods.
  - Brain surgery is a last-resort treatment because its effects are irreversible.

73-3 How, by taking care of themselves with a healthy lifestyle, might people find some relief from depression, and how does this reflect our being biopsychosocial systems?

- Depressed people who undergo a program of aerobic exercise, adequate sleep, light exposure, social engagement, negative-thought reduction, and better nutrition often gain some relief.
- In our integrated biopsychosocial system, stress affects our body chemistry and health; chemical imbalances can produce depression; and social support and other lifestyle changes can lead to relief of symptoms.

Multiple-Choice Questions

1. Which neurotransmitter is affected by antipsychotic medications?

a. Epinephrine
b. Dopamine
c. Norepinephrine
d. Acetylcholine
e. Serotonin

2. Which of the following is most effectively treated with electroconvulsive therapy (ECT)?

a. Psychosis
b. Schizophrenia
c. Obsessive-compulsive disorder
d. Depression
e. Generalized anxiety disorder

3. Which of the following was the purpose of lobotomies?

a. To alleviate depression
b. To minimize delusions and hallucinations
c. To "erase" troubling memories
d. To recover repressed memories
e. To separate the reasoning centers of the brain from the emotional centers

Practice FRQs

1. Identify the category of drugs used to treat schizophrenia and the category of drugs used to treat obsessive-compulsive disorder. Then explain what each of these two categories of drugs does inside the brain.

Answer

2 points: Antipsychotic medications are the preferred drug treatment for schizophrenia. They work by blocking dopamine receptors.

2 points: Antidepressant medications are the preferred drug treatment for obsessive-compulsive disorder. They work by blocking the reuptake of serotonin.

2. Briefly describe four therapeutic lifestyle changes advocated by Stephen Ilardi, and describe their benefits.

(4 points)

Unit XIII Review

Key Terms and Concepts to Remember

psychotherapy, p. 709
biomedical therapy, p. 709
eclectic approach, p. 709
psychoanalysis, p. 709
resistance, p. 710
interpretation, p. 710
transference, p. 710
psychodynamic therapy, p. 710
insight therapies, p. 711
client-centered therapy, p. 712
active listening, p. 712
unconditional positive regard, p. 712
behavior therapy, p. 716
counterconditioning, p. 717
exposure therapies, p. 717
systematic desensitization, p. 717
virtual reality exposure therapy, p. 718
aversive conditioning, p. 718
token economy, p. 719
cognitive therapy, p. 720
rational-emotive behavior therapy (REBT), p. 721
cognitive-behavioral therapy (CBT), p. 723
group therapy, p. 723
family therapy, p. 724
regression toward the mean, p. 730
meta-analysis, p. 731
evidence-based practice, p. 732
therapeutic alliance, p. 735
resilience, p. 737
psychopharmacology, p. 740
antipsychotic drugs, p. 741
antianxiety drugs, p. 741
antidepressant drugs, p. 741
electroconvulsive therapy (ECT), p. 743
repetitive transcranial magnetic stimulation (rTMS), p. 745
psychosurgery, p. 746
lobotomy, p. 746

Key Contributors to Remember

Sigmund Freud, p. 709
Carl Rogers, p. 712
Mary Cover Jones, p. 717
Joseph Wolpe, p. 717
B. F. Skinner, p. 719
Albert Ellis, p. 721
Aaron Beck, p. 721

AP® Exam Practice Questions

Multiple-Choice Questions

1. In an effort to help a child overcome a fear of dogs, a therapist pairs a trigger stimulus (something associated with dogs) with a new stimulus that causes a response that is incompatible with fear (for example, an appealing snack or toy). Which clinical orientation is this therapist using?

a. Psychodynamic
b. Behavioral
c. Biomedical
d. Client-centered
e. Humanistic

2. Which of the following is a similarity between humanistic and psychoanalytic therapies?

a. Both approaches focus on the present more than the past.
b. Both approaches are more concerned with conscious than unconscious feelings.
c. Both approaches focus on taking immediate responsibility for one's feelings.
d. Both approaches focus on growth instead of curing illness.
e. Both approaches are generally considered insight therapies.

3. A psychotherapist who uses a blend of therapies is practicing what kind of approach?

a. Eclectic
b. Psychodynamic
c. Cognitive
d. Cognitive-behavioral
e. Humanistic

4. Some patients whose depression resists drugs have benefited from which experimental treatment?

a. Transference
b. Meta-analysis
c. Antipsychotic drugs
d. Deep-brain stimulation
e. Resistance

5. Which kind of drug is most closely associated with increasing the availability of norepinephrine or serotonin?

a. Antidepressant
b. Antipsychotic
c. Antianxiety
d. Mood-stabilizing
e. Muscle relaxant

6. Which of the following is seen as an effective treatment for severe depression that does not respond to drug therapy?

a. Lobotomy
b. Token economy
c. ECT
d. Crisis debriefing
e. EMDR therapy

7. Echoing, restating, and seeking clarification of what a person expresses (verbally or nonverbally) in a therapy session is called

a. active listening.
b. virtual reality exposure therapy.
c. systematic desensitization.
d. family therapy.
e. classical conditioning.

8. In the context of psychoanalytic theory, experiencing strong positive or negative feelings for your analyst is a sign of what?

a. Counterconditioning
b. Meta-analysis
c. Transference
d. Tardive dyskinesia
e. Aversive conditioning

9. In which kind of therapy would the therapist be most likely to note the following during a session: "Blocks in the flow of free associations indicate resistance"?

a. Cognitive therapy
b. Psychoanalysis
c. Client-centered therapy
d. Behavioral therapy
e. Person-centered therapy

10. Which kind of therapy below is most closely associated with the goal of altering thoughts and actions?

a. Aversive conditioning
b. Psychodynamic
c. Client-centered
d. Family
e. Cognitive-behavioral

11. Allowing people to discover, in a social context, that others have problems similar to their own is a unique benefit of what kind of therapy?

a. Psychodynamic
b. Psychopharmacological
c. Group
d. Cognitive
e. Humanistic

12. Which of the following therapeutic approaches is scientifically supported?

a. Recovered-memory therapies
b. Rebirthing therapies
c. Cognitive therapy
d. Energy therapies
e. Crisis debriefing

13. Most antipsychotic drugs mimic a certain neurotransmitter by blocking its activity at the receptor sites. These drugs affect which one of the following neurotransmitters?

a. Adrenaline
b. Epinephrine
c. Serotonin
d. Dopamine
e. Acetylcholine

14. Which of the following is *not* recommended by therapists as a way to help prevent or get over depression?

a. Recovered-memory therapies
b. Aerobic exercise
c. Light exposure
d. Increased social connections
e. Antirumination strategies

15. A psychotherapist states, "Getting people to change what they say to themselves is an effective way to change their thinking." This statement best exemplifies which kind of therapeutic approach?

a. Behavioral
b. Psychodynamic
c. Biomedical
d. Cognitive
e. Active listening

Free-Response Questions

1. Your friend Lawrence recently confided in you that he has been diagnosed with major depression. He heard about several different kinds of treatments: psychodynamic therapy, exposure therapy, REBT, SSRIs, and rTMS. Explain what you would tell Lawrence about how each type of therapy works and whether research indicates that it might be an effective treatment for major depression.

Rubric for Free-Response Question 1

1 point: Psychodynamic therapy involves a therapist and client attempting to gain perspective and insight into a client's unconscious conflicts and anxieties. Outcome research indicates that psychodynamic therapy has had success with depression symptoms. Pages 710–711

1 point: Exposure therapy exposes people to the things that they fear and avoid in order to reduce the fear or anxiety. This type of therapy is specifically focused on reducing specific anxiety symptoms and is not designed to treat depression. Pages 717–718

1 point: Albert Ellis' rational-emotive behavior therapy (REBT), a type of cognitive therapy, attempts to stop irrational thinking by challenging a person's illogical, self-defeating assumptions. Since many of the symptoms of major depression involve negative, pessimistic thinking, this treatment is worth exploring as a treatment for depression. Page 721

1 point: SSRIs, such as Zoloft, Paxil, and Prozac, work by partially blocking the reabsorption and removal of serotonin from synapses. The fact that more serotonin remains in the synapses serves to reduce the symptoms of depression. Pages 741–743

1 point: Repetitive transcranial magnetic stimulation (rTMS) sends repeated pulses of magnetic energy into the brain, usually into the left frontal lobe. This approach has proven effective in the treatment of depression. Page 745

2. For each of the following pairs, first define the particular type of treatment referenced, then explain the rationale for using this therapy to treat an individual with the particular disorder with which it is paired.

- Bipolar disorder and the biomedical approach
- Phobias and systematic desensitization
- Dissociative identity disorder and psychoanalysis
- Addiction and group therapy
- Depression and rational-emotive behavior therapy (REBT)

(5 points)

3. Different therapies rely on different underlying psychological perspectives about causes and explanations of thinking and behavior. List at least one specific therapeutic technique for each of the psychological approaches below and explain how that technique uses that psychological approach.

- Biological
- Cognitive
- Behavioral

(3 points)

Multiple-choice self-tests and more may be found at www.worthpublishers.com/MyersAP2e