have shown that people repeatedly awakened during the REM stage for several nights will compensate by spending twice as much time in REM sleep the first night they are left alone, an observation that has led to much speculation about the role of this type of sleep.

Some researchers have hypothesized that REM sleep strengthens neural connections in the brain, a theory supported by the fact that infants and children, whose brains are still developing, require larger amounts of REM sleep than adults. It has also been suggested that REM sleep may be linked to a specific neurotransmitter, norepinephrine, which helps maintain alertness when people are awake. In addition, REM sleep has been investigated in connection with learning and memory in studies that showed decreased retention of learned skills in persons who were deprived of REM sleep. However, a contrasting (and controversial) theory maintains that the REM stage is a way for the body to “empty” the brain so that its neural networks do not become overloaded.

Further Reading

Rating scale
Any instrument designed to assist in the measurement of subjective evaluations of, or reactions to, a person, object, event, statement, or other item of interest.

Several varieties of rating scales have been developed. One common form of rating scale presents the rater with a spectrum of potential responses that includes antithetical elements at each end of a range of intermediate possibilities, on which the rater is expected to indicate the position that most accurately represents the rater’s response to the subject in question. Another form of rating scale presents the rater with a list of characteristics or attributes from which the rater is expected to select those which the rater believes apply to the subject in question. Rating scale instruments are used in psychological research primarily to assess qualities for which no objective measurement techniques have been developed.

Further Reading

Rational-emotive behavior therapy
A therapeutic technique that reduces maladaptive behaviors by showing clients that their behavior is caused by irrational thoughts.

Rational-emotive behavior therapy (REBT) belongs to a class of therapies termed “cognitive-behavioral” therapies. The defining features of these therapies are an emphasis on achieving measurable goals by manipulating internal and external reinforcers. That is, cognitive-behavioral therapists help clients identify the thoughts and beliefs that might be prolonging their distress or anxiety. The assumption is that attitudes and expectations that we have for ourselves influence how we cope and respond to challenge.

Rational-emotive behavior therapy is the creation of psychologist Albert Ellis. Ellis believes that people are born with a predisposition to be either rational or irrational, and that mental disorders are the product of faulty learning. Specifically, REBT conceptualizes psychological disturbances as the products of maladaptive and irrational cognitions (thoughts) that have been learned, and which cause and are in turn caused by emotions and behaviors. It is not only the events in our lives, but also our interpretation of those events that can cause psychological disturbances. This is an optimistic theory, inasmuch as it predicts that, since mental disorders are the result of learning, they can be unlearned. The ultimate goals of REBT are to teach clients to think more rationally, to feel more appropriately, and to behave more adaptively.

As a therapy, REBT is active and sometimes confrontational. Cognitive, emotive, and behavioral methods are used in combination to facilitate client change. Some of the cognitive methods include: disputing irrational beliefs (e.g., pointing out how irrational it would be for a client to believe he/she had to be good at everything in order to consider himself/herself worthwhile); thought stopping (the therapist interrupts the maladaptive thought by yelling “STOP”); reframing (situations are looked at from a more positive angle); and problem solving. The emotive techniques, including role playing, modeling, the use of humor, and shame-attacking exercises, are all aimed at diffusing the upsetting emotions connected with certain behaviors or situations. Finally, behavioral techniques such as the use of homework assignments, risk-taking exercises, systematic desensitization (which involves incremental exposure to the frightening situation while focusing on remaining relaxed), and bibliotherapy
(reading about the disorder) are all used to teach clients that they can safely and comfortably substitute adaptive behaviors for the maladaptive ones they have relied on in the past.

REBT uses something called the ABCDE model to help clients understand how their thoughts, feelings, and behaviors are related. The A stands for “activating events,” which are related to rational or irrational “beliefs” (B). The beliefs involve “consequences” (C), which, if the belief is irrational, may be emotional disturbances. The D represents the therapist “disputing” the irrational belief and the E stands for the more “effective” way of thinking that marks success with REBT.

Consider, as an example, a student who performs badly on an exam. The poor grade is the activating event. The student’s irrational belief is that, because of this bad grade, he or she is neither intelligent nor a worthwhile person. The consequence is depressed mood and perhaps feelings of anxiety connected to test-taking. These reactions could, in turn, result in avoidance of classes and tests or withdrawal from academically related activities. In REBT, the therapist would dispute the student’s belief that the bad grade represents incompetence or worthlessness. The therapist would help the student to adopt more effective behaviors and beliefs, such as the belief that the poor grade is simply a reflection of course difficulty or the student’s inadequate preparation, rather than a measure of the student’s worth as a person.

REBT has been extensively researched. Many studies have demonstrated its success in treating various psychological troubles ranging from depression to anxiety disorders and even eating disorders such as bulimia. Additionally, REBT has been shown to work in both individual and group counseling settings. Because REBT teaches clients to monitor and alter their thoughts, feelings and behaviors, it teaches clients to help themselves. This feature is one of its greatest strengths, and is reflected in low relapse rates, compared to drug treatment in the absence of any accompanying therapy. Further advantages of REBT include its rapid symptom reduction and the short duration of therapy; therapeutic goals are frequently achieved within 10 to 20 sessions.

Timothy Moore

Further Reading

Reaction time
Generally, in psychological measurement, the interval of time between the presentation of a stimulus to a subject and the beginning of the subject’s response to that stimulus.

Several categories of reaction time, such as simple reaction time, have been established and studied in experimental psychology. In a simple reaction time experiment, the subject is presented with one simple stimulus, such as a light, and instructed to perform one simple response, such as pressing a button. In a discrimination reaction time experiment, the subject is presented with one of two or more different stimuli, such as a red light and a green light, and instructed to perform a response to only one of the stimuli, such as pressing a button when the red light is presented but not when the green light is presented. In a choice reaction time experiment, the subject is presented with one of two or more different stimuli, such as a red light and a green light, and instructed to perform a response to only one of the stimuli, such as pressing a button when the red light is presented but not when the green light is presented. In a choice reaction time experiment, the subject is presented with one of two or more different stimuli, such as a red light and a green light, and instructed to perform different responses depending upon which stimulus is presented, such as pressing a red button when the red light is presented and pressing a green button when the green light is presented. There are other types, and many variations of reaction time experiments.

Readiness test
A test designed to assess the developmental condition of an individual to determine whether or not, or to what extent, the individual could gain from some particular experience.

Readiness tests are commonly used in educational situations, and often include the measurement of cognitive, perceptual, emotional, motivational, and other factors involved in the learning process, in an attempt to determine if a student is in a position to benefit from a particular course of instruction. Readiness tests are based on the view, shared by almost all psychologists, that an individual reaches maturity in various areas only by passing through corresponding series of consecutive developmental levels, and that these series of levels are essentially similar in all normal individuals.

Reality therapy
A therapeutic approach in which a therapist helps a client understand the reality of the world around them and how to function accordingly.