

Glossary

Adrenocorticotrophic hormone (ACTH): A hormone produced by the anterior pituitary that regulates the production of cortisol and androgens.

Buprenorphine: An opioid partial agonist that is often used for the treatment of opioid use disorder.

Cognitive Behavioral Therapy (CBT): A psychological treatment modality that emphasizes helping patients/clients address and modify thinking patterns as a pathway to behavior change. CBT tends to focus on current life circumstances and teaches patients how to cope with problems to reduce symptoms.

Desipramine: A type of tricyclic antidepressant medication that is used for the treatment of depression.

Dialectical Behavioral Therapy (DBT): A multicomponent treatment model originally developed to treat individuals who are chronically suicidal and diagnosed with borderline personality disorder.

Dorsolateral prefrontal cortex: A brain area managing executive functions such as working memory.

Experimental study: A type of research design that evaluates the effectiveness of an intervention by randomly assigning participants to either intervention group.

Interaction effect: The effect of one variable depends on the other.

Matrix Model: A structured psychosocial protocol and treatment framework that was established in the 1980s to treat stimulant use. The model incorporates individual/conjoint

sessions; early recovery skills groups; relapse prevention group sessions; family education sessions; and social support sessions. More recent revisions of the model integrate motivational interviewing, cognitive-behavioral techniques, contingency management, twelve-step facilitation (TSF), and family involvement to assist clients through the drug recovery process.

Methylphenidate: A type of stimulant medication that is often used in the treatment of Attention-Deficit Hyperactivity Disorder.

N-acetylcysteine (NAC): An amino acid that can reduce the release of a neurotransmitter called glutamate that is important to cognition and other nervous system-related responses.

Non-experimental study: A type of research design lacking random assignment of participants. It often evaluates a single treatment group or observes naturally occurring phenomena.

Oxytocin: A type of hormone that plays a role in reproduction, childbirth and social bonding.

Placebo: A medicine or treatment with no active therapeutic effect. It is often used in medical research as a control to test the effectiveness of a real medicine or treatment.

Quasi-experimental study: A type of research design that evaluates the effectiveness of an intervention without random assignment of the participants.

Repetitive Transcranial Magnetic Stimulation (rTMS): A brain stimulation technique that is often used to treat various psychiatric conditions.

Sham treatment: A type of experimental condition in which researchers pretend to deliver a treatment. It's often used as a comparison condition to ensure rigorous evaluation of a treatment method by eliminating participant bias.

Standard deviation: Average distance between the sample mean and any other scores for a given variable.

Stimulants: A drug class covering a wide range of drugs that speed up the body's systems and processes, including increasing activity in the central nervous system. Stimulants come in various forms, including powders, pills, liquids, and injectables and some may be prescribed for medicinal and therapeutic purposes for certain conditions. Some stimulants are legal while others are considered illegal or illicit. Examples include caffeine, amphetamines, methamphetamines, and cocaine.

Transcranial direct current stimulation (tDCS): A non-invasive brain stimulation technique that aims to support behavior change by delivering a weak electrical current to the brain via one or two electrodes placed on the scalp. It can be used in conjunction with other treatments and interventions.

Treatment as usual (TAU): A commonly used study condition or control/comparison group in therapeutic and clinical intervention studies. TAU groups often represent a study condition where no changes to practice or treatment are implemented since participants assigned to this condition receive a version of treatment that is considered standard or typical, based on the discipline. Researchers typically compare a TAU group to one or more groups that receive an intervention or treatment of interest.

Twelve-step facilitation (TSF): A structured approach that facilitates recovery from substance use disorders and promotes abstinence by guiding individuals through a series of twelve-step programs, involving support from peers who experienced similar challenges. Examples include Alcoholic Anonymous and Narcotic Anonymous.