

CONSCIOUSNESS - All the sensations, perceptions, memories, and feelings you are aware of at any instant

Levels of Consciousness

- Conscious (Monitoring, Controlling)
- Preconscious (Automatic behaviors, Tip-of-the-tongue, Subliminal perception)
- Subconscious (Aka – unconscious)

Altered States of Consciousness

- Sleep, dreams
- Hypnosis
- Meditation
- Drugs

Common Characteristics of Altered States

- Shallow cognitions
- Changed perceptions of self and world
- Lowered inhibitions

Stream of Consciousness = Refers to the continuously changing flow of consciousness

SLEEP

Why sleep? (Preservation, recuperation, consolidate/rebuild memory, creativity, growth hormone)

Biological Rhythms = periodic physiological fluctuations

Biology (Pappenheimer study,

Circadian Rhythm = the biological clock. Regular bodily rhythms that occur on a 24-hour cycle, such as of wakefulness and body temperature

Sleep Deprivation = fatigue, impaired concentration, immune suppression, irritability, slowed performance

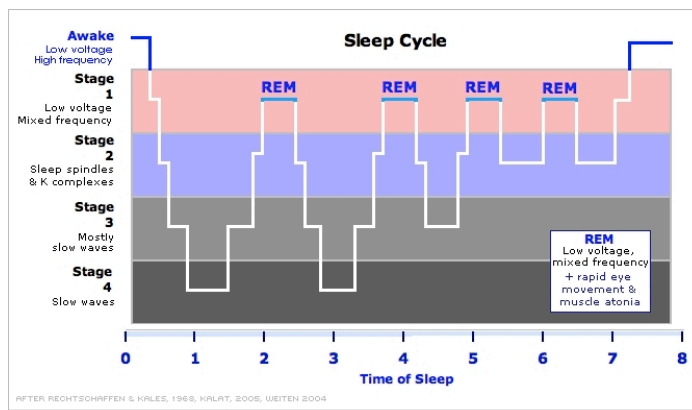
Cycling through the 4 stages of sleep

NREM 1: breathing becomes more regular; heart rate and BP decrease

NREM 2: relaxation increases; less responsive to external stimuli; sleep spindles, K Complexes

NREM 3: deeper level of sleep (Delta waves)

REM (Rapid Eye Movement) Sleep = vivid dreams commonly occur, also known as paradoxical sleep - muscles are generally relaxed, but brain is most active



DREAMS - sequence of images, emotions, and thoughts passing through a sleeping person’s mind

Sigmund Freud-The Interpretation of Dreams (1900) - dreams viewed as wish fulfillment

Manifest Content - remembered story line of a dream

Latent Content - underlying, censored meaning of a dream

Information-Processing

Activation-Synthesis Hypothesis = Dreams are triggered by neural activity as you process events from the day.

Insomnia = recurring problems in falling or staying asleep

Narcolepsy = uncontrollable sleep attacks, sufferer may lapse directly into REM sleep, often at inopportune times, runs in families; cause unknown

Sleep Apnea = characterized by temporary cessations of breathing during sleep and consequent momentary reawakening, SIDS, Age, increased weight, men

Night Terrors = high arousal-appearance of being terrified, usually in Stage 4, within 2-3 hours of falling asleep

Somnambulism = Sleep walking, sleep talking, eating, etc...

Hypnosis = a social interaction in which one person (the hypnotist) suggests to another (the subject) that certain perceptions, feelings, thoughts or behaviors will spontaneously occur

Posthypnotic Amnesia = supposed inability to recall what one experienced during hypnosis, induced by the hypnotist's suggestion

Posthypnotic Suggestion = suggestion to be carried out after the subject is no longer hypnotized used by some clinicians to control undesired symptoms and behaviors

Disassociation

Sensory Deprivation (SD) = Any major reduction in amount or variety of sensory stimulation

Benefits called REST: Restricted Environmental Stimulation Therapy

Meditation = A set of techniques used for altering consciousness through contemplation (control the autonomic)

Concentrative = Contemplation by focusing on an object, Cross-legged, Om, focused breathing, Yoga

Opening-Up/Receptive = Meditation during every day life

PSYCHOACTIVE DRUGS: Drugs that produce a psychopharmacological effect. Meaning they effect bx, mood, consciousness

Addiction: a physical or psychological dependence on a drug.

Tolerance: it takes more than before to get the same feeling.

Withdrawal: physical illness or discomfort when not using the drug.

Stimulants = arouse/excite CNS. Increase heart rate, stamina, respiration, and blood pressure, Decrease appetite

Caffeine (coffee, soda...) Suppresses adenosine (a depressant of the brain)

Nicotine (cigs, chew...) Activates and increases Ach (Acetylcholine)

Amphetamines (speed, methamphetamines, diet pills...) Activates DA and NE, prevents reuptake

** Amphetamine Sensitization –occasional users, a small amount of the drug has a bigger effect

Cocaine/Crack Increases transmission of NE and DA

Methylenedioxymethamphetamine (MDMA, ecstasy) Increases release of 5-HT (Serotonin) / NE

Depressants = inhibit or slow the CNS. Reduce anxiety, help with insomnia, slow reflexes, impair judgment.

Anti-Anxiety (Valium, Xanax...) Activates/enhances GABA. Benzodiazepines

Sedatives-Hypnotics and Anti-Anxiety (barbiturates, GHB) Activates/enhances GABA

Alcohol Enhances GABA (an inhibitory NT), decreases effectiveness of DA, effects Cerebral Cortex, Limbic System, Cerebellum, Hypothalamus, and Medulla

Narcotics = reduce pain, reduce diarrhea, and suppress coughing.

Opiates: Derived from the opium poppy (Morphine, Heroin, Codeine)

Opioids: Same chemical structure, but synthetic (Methadone, Percodan, Demerol)

Mimic endorphins

Naloxone (blocks the drug) Methadone program (transfer addiction)

Hallucinogens = alter consciousness of inner and outer worlds.

Lysergic Acid Diethylamide (LSD) Blocks 5HT

Delta-9-tetrahydrocannabinol (THC) mimics Anandamide (a NT) by binding with cannabinoid receptors in the brain.

DMT