

FROM NOTES

Consciousness

- Awareness
- States of consciousness
 - Sleep and dreaming
 - Drug states
 - Hypnosis
- Attention
 - Paying from limited resources
 - Selective Attention
 - “Cocktail Party” Phenomenon: Selectively attending to a conversation despite background sounds or extraneous information
 - Divided attention
 - Dichotic Listening
 - Using two ears
 - Headphones with different channels in each ear
 - Shadowing: repeating what you’re hearing in either ear
 - Automaticity: Requires no attention. E.g. your name
- Ways of studying consciousness:
 - Introspection: observing own mind (w/out bias)
 - Uses Structuralism; structure of the mind
 - Behaviorism: observing behaviors of others to make a hypothesis
 - Psychophysiology: measure brain activity

- Subject report: either a prediction or opinion e.g. “I feel sad”
- **Altered state of consciousness**: State of consciousness that only you are experiencing (not anyone else)
 - Dreaming
 - Drug States
 - Hypnosis
 - Meditation
 - Near Death Experiences
- Sleep and Dreaming
 - Stages of Sleep
 - Stage 1: light stage
 - Stage 2: light stage
 - Stage 3 & Stage 4: Deep Sleep (slow wave sleep)
 - REM Sleep: Rapid eye movement; usually indicates dreaming
 - Eyes move rapidly
 - Dreaming
 - Paradoxical sleep: voluntary muscles are essentially paralyzed
 - Genital arousal
 - Increased heart rate
 - NREM: any stage that is not REM
 - EEG: determined stages by identifying similar brain wave patterns
 - Awake: Beta waves
 - Drowsy/ Relaxed: Alpha waves

- Stage 1: Theta waves
- Stage 2: sleep spindles & K complex
- Stages 3 & 4: Delta waves
- REM: fast, random
- Dreams:
 - **REM Rebound**: increased amounts of REM after being deprived of REM sleep on earlier nights
 - REM sleep decreases as you age, as does sleep in general. Older people need less sleep.
 - Interpreting Dreams: what do they mean?
 - Manifest content: words you use
 - Latent content: underlying meaning
 - Symbols
 - Wish fulfillment
 - Creativity
- **Purpose of sleep: 4 Theories**
 - Restorative theory: Sleep is necessary to the health of the body. Helps replenish chemicals & repair cellular damage.
 - Growth theory: Pituitary gland releases growth hormones during sleep in children.
 - Memory Consolidation/ Learning theory: When people get adequate sleep, they remember better what they learned that day.

- Adaptive Non-responding theory: We evolved sleep patterns to avoid predators by sleeping when predators are more active

- Sleep Disorders

- Insomnia: inability to sleep, pretty common w/ anxiety
 - Can't fall asleep
 - Can't get back to sleep after sleeping and waking up
- Narcolepsy: falling asleep immediately when you do not want to
 - Happens after an intense emotional experience
- Sleep Apnea: Brain doesn't get enough oxygen
 - Sometimes the uvula covers the windpipe
- Sleep Walking: Sleeper rises & wanders about
 - NREM state (typically stage 3)
 - Mainly affects children, usually goes away as they age
- Psychoactive Drugs: Drugs that alter thinking, perception, and memory
 - Physical Dependence
 - Addiction: drugs substitute for natural neurotransmitters
 - Tolerance: more drug needed to achieve the same affect
 - Withdrawal: nausea, pain, tremors, high blood pressure, and removal of an addictive drug
 - Psychological dependence: you believe you need a drug. You think that the drug is necessary to maintain a feeling emotional or psychological well-being

- Stimulants - Excite the sympathetic nervous system

 - Cocaine

 - Amphetamines

 - Nicotine

 - Caffeine

 - MDMA

- Depressants - decrease the sympathetic nervous system

 - Valium

 - Barbiturates

 - Alcohol

 - Narcotics (Know opium, morphine and heroin)

- Hallucinogens - produce hallucination or intoxication

 - LSD

 - PCP

 - MDMA (Ecstasy or X)

 - Marijuana (Hard to overdose and get addicted)

 - Natural Hallucinogens: Mescaline and Psilocybin

- Opponent Process Theory

- Dosage, mode of ingestion and prior experience are factors of drug states

- Hypnosis - 4 elements

 - Focus of attention

 - Relaxation

 - Accept suggestions

- Use imagination

Posthypnotic amnesia: Temporary memory loss; almost always returns to conscious

Posthypnotic suggestion: Suggestion carried out after hypnosis

- Modal Model of Memory

- Eyewitness identification issues and innocence project
- Types of Long term Memory **KNOW DEFINITIONS OF EACH**
 - Episodic
 - Semantic
 - Procedural

False memories: can be caused by

- meaning fits original memory
- meaning fits mistaken context

- “Other Race” Effect

- What causes Forgetting:

- Organic reason
- Time decay
- Lack of Practice
- Learning Failure
- Repression
- Prospective memory failure
- Retrieval failure
- Interference
- Distortion

- Types of Amnesia
 - Retrograde: soap opera amnesia
 - Anterograde: memento amnesia; struggle to form new long term memories
- Conscious explicit memory of new experiences is not possible for amnesia patients
- Unconscious implicit memory of new experiences is intact

- Cognitive psychology
 - Problem solving
 - Associationist: trial and error
 - Gestalt: insight
 - Reproductive problem solving: using known solutions
 - Algorithm: step by step solutions
 - Heuristics: a “rule of thumb”

Problem Solving could be an impediment

-Stroop effect

- Functional Fixedness: the only uses of an object are from prior knowledge
- 4 stages of Problem Solving
 - Prep
 - Fixation
 - Incubation
 - Illumination

Motivation and Emotion