AP Psych Review
Schools of Thought

* Behavioral
* Psychoanalytic/Psychodynamic
* Humanistic
* Cognitive
* Biological
* Evolutionary
* Social-Cultural
* Gestalt
Early People

* John Locke
* William Wundt
* Edward Titchener
* William James
* Mary Calkins
* Margaret Washburn
* Max Wertheimer
Research

- Case Study
- Survey
- Naturalistic observation
- Longitudinal study
- Cross-sectional
- Experiment
The Experiment

* Operational definitions
* Confounding variable
* Independent variable
* Dependent variable
* Control group
* Experimental group
Nervous System

* Central NS
* Peripheral NS
* Somatic NS
* Autonomic NS
* Parasympathetic NS
* Sympathetic NS
The Neuron

* Action potential
* Resting state
* Polarized
* Selectively permeable
* Refractory period
* Reuptake
The Neuron

- **Cell body**: (the cell’s life-support center)
- **Dendrites**: (receive messages from other cells)
- **Axon**: (passes messages away from the cell body to other neurons, muscles, or glands)
- **Neural impulse** (action potential): (electrical signal traveling down the axon)
- **Terminal branches of axon**: (form junctions with other cells)
- **Myelin sheath**: (covers the axon of some neurons and helps speed neural impulses)
<table>
<thead>
<tr>
<th>Neurotransmitter</th>
<th>Function</th>
<th>Examples of Malfunctions</th>
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</thead>
<tbody>
<tr>
<td>Acetylcholine (ACh)</td>
<td>Enables muscle action, learning, and memory.</td>
<td>With Alzheimer’s disease, ACh-producing neurons deteriorate.</td>
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<tr>
<td>Dopamine</td>
<td>Influences movement, learning, attention, and emotion.</td>
<td>Excess dopamine receptor activity is linked to schizophrenia. Starved of dopamine, the brain produces the tremors and decreased mobility of Parkinson’s disease.</td>
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<tr>
<td>Serotonin</td>
<td>Affects mood, hunger, sleep, and arousal.</td>
<td>Undersupply linked to depression. Prozac and some other antidepressant drugs raise serotonin levels.</td>
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<tr>
<td>Norepinephrine</td>
<td>Helps control alertness and arousal.</td>
<td>Undersupply can depress mood.</td>
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<tr>
<td>GABA (gamma-aminobutyric acid)</td>
<td>A major inhibitory neurotransmitter.</td>
<td>Undersupply linked to seizures, tremors, and insomnia.</td>
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<tr>
<td>Glutamate</td>
<td>A major excitatory neurotransmitter; involved in memory.</td>
<td>Oversupply can overstimulate brain, producing migraines or seizures (which is why some people avoid MSG, monosodium glutamate, in food).</td>
</tr>
</tbody>
</table>
**Scans**

* EEG
* CT/CAT
* PET
* MRI
* fMRI
The Limbic System
Sensation

* Absolute threshold
* Weber’s Law
* Parts of eye and ear
* Olfaction
* Feature detectors
* Parallel processing
The Eye
The Ear

声波

外耳

中耳

内耳

鼓膜

听骨链

半规管

听骨

听觉神经

蜗牛

椭圆窗（听小骨附着处）

放大图，显示蜗牛部分未卷曲，以增加清晰度
Sleep

* Hypnogogic state
* Sleep spindles (stage 2)
* Delta waves
* Sleep apnea, Insomnia, Narcolepsy
* REM
* REM rebound
Stages of Sleep

Stages of Healthy Sleep

Sleep Stage

Awake

1

2

3

4

REM

REM

REM

REM

HOURS OF SLEEP
Dreams

* Freud
* Manifest content
* Latent content
* Activation-Synthesis
* Information-Processing
Drugs

* Stimulants
* Depressants
* Opioids
* Tolerance
* Withdrawal
Hypnosis

* Anton Mesmer
* Ernest Hilgard- Hidden observer
* Divided Consciousness
* Dissociation
* Posthypnotic suggestion
Classical Conditioning

* Ivan Pavlov
* Respondent behavior
* UCS, UCR, NS, CS, CR
* Taste aversion (John Garcia)
* Learned helplessness (Martin Seligman)
* Behaviorism (John Watson)
Operant Conditioning

* E.L. Thorndike
* B.F. Skinner
* Positive/negative reinforcers
* Positive/negative punishers
* Schedules of reinforcement (Fixed Ratio, Fixed Interval, Variable Ratio, Variable Interval)
Memory

* Encoding, storing, retrieving
* Sensory memory → Short term memory → Long term memory
* Sensory- echoic vs iconic
Memory

* Flashbulb
* episodic, semantic, procedural
* Serial position effect (primacy & recency)
* Mnemonics
* Elaborative rehearsal
Memory

* Forgetting curve (Ebbinghaus)
* Proactive vs. retroactive interference
* Retrograde vs. anterograde amnesia
* Long-term potentiation
Memory Distortion

* Misinformation effect

* Elizabeth Loftus

Leading question asked during witness testimony

Possible schemas activated

Response of subjects asked one week later, “Did you see any broken glass?” (There was none.)

“Yes”—14%

“About how fast were the cars going when they hit each other?”

“About how fast were the cars going when they smashed into each other?”

“Yes”—32%
**Language**

* Phonemes
* Morphemes
* Syntax vs. semantics
* Noam Chomsky
* Benjamin Whorf-- Whorf-Sapir Hypothesis (Linguistic Relativism)

"We dissect nature along lines laid down by our native language. Language is not simply a reporting device for experience but a defining framework for it."

-Benjamin Lee Whorf
Cognition

* Concepts
* Prototypes
* Schemas
* Algorithms
* Heuristics
* Insight
Obstacles to Problem Solving

* Mental set
* Functional fixedness
* Availability heuristic
* Representativeness heuristic
* Framing
* Anchoring effect
* Bias (confirmation, hindsight, overconfidence)
Intelligence

* Charles Spearman (G factor)
* Raymond Cattell (Fluid vs. crystallized)
* Robert Sternberg (Triarchic theory)
* Howard Gardner (Multiple intelligences)
* Alfred Binet (Mental age)
* David Wechsler (WAIS, WISC)
* Lewis Terman (Giftedness)
Test Construction

* Standardization (bell curve)
* Reliability
* Validity
Freud & Personality

* Id, ego, superego
* Defense mechanisms (repression, displacement, projection, denial, reaction formation, rationalization, regression)
* Neo-Freudians (Adler, Horney, Jung)
Personality & Traits

* Gordon Allport (Hierarchy of traits)
* Raymond Cattell (16 PF)
* Hans Eysenck (Extroversion)
* Big Five (Costa & McCrae
  * remember OCEAN)
Personality

*Carl Rogers (Unconditional positive regard)

*Abraham Maslow (Hierarchy of Needs)

*Albert Bandura (Self-efficacy, reciprocal determinism)

*Julian Rotter (Locus of control)
Assessing Personality

* Projective tests (Rorschach Inkblot test, TAT)
* Self-report (MMPI-2, Myers-Briggs)
Abnormal Psych

* David Rosenhan study

* 4 D’s of diagnosis:
  * Deviance
  * Dysfunction
  * Distress
  * Danger
Neurodevelopmental Disorders

* ADD/ADHD

* Autism Spectrum Disorder
Depressive Disorders

* Major Depression
* Persistent Depressive Disorder
Somatoform Disorders

* Conversion

* Hypochondriasis
Schizophrenia Spectrum

* Delusions, hallucinations, word salad, disorganized speech & thought
* Dopamine hypothesis
* Diathesis-stress model
Dissociative Disorders

* Dissociative Identity Disorder

* Dissociative Amnesia, Fugue
Therapy

* Insight (psychoanalytic/psychodynamic, cognitive, humanistic)
* Behavior
* Biomedical
Therapy

* Psychoanalytic: Sigmund Freud
* Cognitive: Albert Ellis (REBT), Aaron Beck (CBT)
* Humanistic: Carl Rogers (client-centered)
Behavior Therapy

* Joseph Wolpe (Systematic desensitization)
* Aversion therapy
* Virtual reality therapy
* Flooding
* Token economy
Biomedical Therapy

- Psychopharmacology
- Antianxiety drugs (Valium, Xanax)
- Antipsychotic
- Mood-stabilizing (Lithium)
- Antidepressant (Prozac, SSRI)
Human Development

* Zygote, embryo, fetus
* Teratogens (FAS)
* Reflexes (rooting, Moro, Babinski)
* Mary Ainsworth (attachment)
* Harry Harlow (comfort vs. nourishment)
* Diana Baumrind and parenting styles
Human Development

* Piaget (Cognitive development)
* Object permanence, egocentrism, conservation
* Erik Erikson (Social development)
* Lawrence Kohlberg (Moral reasoning)
* Carol Gilligan criticism of Kohlberg
* Adolescence
Motivation

* Instinct
* Drive-reduction theory
* Arousal theory
* Yerkes-Dodson law
* Maslow’s Hierarchy of Needs
* Achievement motivation
* Extrinsic motivation
* Intrinsic motivation
* Overjustification effect
Hunger

* Hypothalamus (LH vs. VMH)
* Glucose
* Appetite hormones (leptin, orexin, insulin)
* Set-point
* Anorexia nervosa
* Bulimia nervosa
* Binge eating
Sex

* Alfred Kinsey
* Masters and Johnson
* Hypothalamus
* Heterosexuality, bisexuality, homosexuality
Emotion

* Sympathetic NS vs. Parasympathetic NS
* James-Lange
* Cannon-Bard
* Schachter-Singer Two-factor
Stress

* Fight or flight
* Hans Selye (GAS)
* Social conflicts (ap-ap, av-av, ap-av, multiple ap-av)
Social

* Fundamental Attribution Error
* Internal vs. external attribution
* Just-world phenomenon
Social

* Self-serving bias
* Self-fulfilling prophecy (Jane Elliot)
* Central vs. peripheral route of persuasion
* Foot-in-the-door vs Door-in-the-face
Social

* Cognitive dissonance (Leon Festinger)
* Social facilitation vs. social inhibition
* Social loafing
* Group think
- Group polarization
- Deindividuation
- Bystander effect
- Altruism
- Conformity (Asch study)
- Obedience (Milgram)
- Roles (Zimbardo)
* Stereotype
* Prejudice
* Discrimination
* In-groups vs. out-groups
* Ethnocentrism
* Aggression