

Perspectives

Introspection
Wilhelm Wundt—1st lab, Germany
Structuralism
William James—1st text, Harvard
Functionalism
Gestalt—total experience “the whole”
Perception
Psychoanalysis—Freud
Behaviorism—Watson (Little Albert),
Skinner (operant conditioning)
Humanism (Maslow, Rogers)
Biological—brain chemistry, hormones, etc.
Evolutionary (sociobiology)—impact of traits that promote survival of species
Cognitive—thinking patterns
Sociocultural—environment

Shaw-Little →

Ethics

Animal research
Clear scientific purpose
Humane treatment
Legal acquisition of subjects
Limit suffering to least feasible
Human research
Informed consent
Limit deception
No coercion
Protect from harm
Confidentiality
Debrief afterwards

HISTORY & RESEARCH

Psychological research

Limits of intuition
Hindsight bias
Overconfidence
Confirmation bias
Scientific attitude
Curiosity
Skepticism
Humility

Scientific method
Theories
Hypothesis
Operational definitions
Replication
Methodology
Case study
Survey
Wording effects
Random sampling
False consensus effect
Naturalistic observation
* Must avoid Hawthorne Effect
Correlational studies
Prediction
NOT CAUSATION
Illusory correlation
Superstition
Experiment
(see experimentation)

Observation bias
↓
Hawthorne Effect
↑
change how you act because you're being observed

Experimentation

Cause & effect
Procedure:
Blind study
Double-blind study
Experimental condition vs. Control condition
Independent variable
Experimenter manipulates dependent variable
Dependent variable
Experimenter measures
Confounding variables
Random selection
Random assignment

Measuring data

Descriptive statistics
Central tendency (averages)
Mean
Median
Mode
Normal curve
Correlations (relationships)
Scatterplot
Correlation coefficient
Variation
Range
Standard deviation
Inferential statistics
Do my results matter?
* Sample size influence
* Significant differences
 $p < .05$ (alpha level)

NEUROSCIENCE

Neural communication

Resting potential
-70 mV inside
Neuron is **polarized**
Action potential (all-or-none)
Neurotransmitters bind to dendrites
Neuron reaches -55 mV
Becomes **depolarized**
Sodium/potassium ions
Signal moves down the axon
Neurotransmitters release to synapse
Must **repolarize**
Reuptake of neurotransmitters
Return to -70 mV
Refractory period (can't fire)

Myelin sheath
Insulates motor neurons
Speeds message
Decay of myelin sheath
- multiple sclerosis
Intelligence

Excitatory neurotransmitters
Acetylcholine (skeletal muscles)
Serotonin (depression/general well-being)
Dopamine (high - schizophrenia; low—depression)
Norepinephrine (Alertness, linked to fight-or-flight)
Endorphins (pain relief)
Inhibitory neurotransmitter (GABA)
Effect of agonists/antagonists

The brain

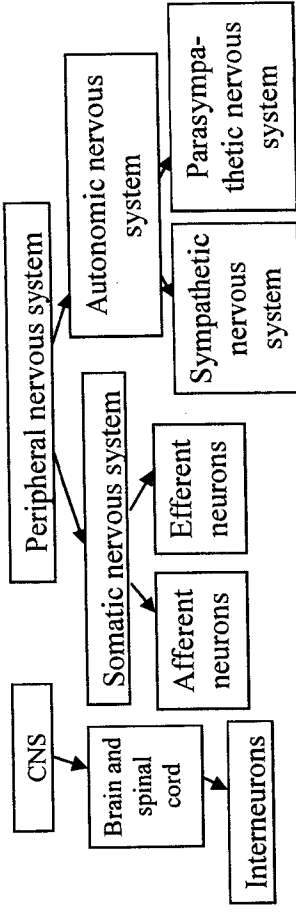
Plasticity—neurons can be used for new purposes

Hindbrain:
Cerebellum—coordination
Medulla—breathing, heartbeat
Pons—sleep, arousal, dreams
Reticular formation—arousal

Midbrain:
At the intersection of forebrain & hindbrain (spatial awareness)

Forebrain:
Thalamus—sensory switchboard
Limbic system—emotion
Hippocampus (memory)
Amygdala (fear, anger)
Hypothalamus (biological needs, e.g. hunger, sex, thirst)
Cerebrum/cerebral cortex
Prefrontal cortex (planning, or organization, risk assessment)
Frontal lobes (motor cortex, mirror neurons)
* Broca's area (speech)
Parietal lobes (somatosensory cortex)
* Angular gyrus
Temporal lobes (auditory cortex)
* Wernicke's area
Occipital lobes (visual cortex)

Organization of the nervous system



Hemispheric specialization

Split-brain surgery (corpus callosum severed)
*Used to treat uncontrolled seizures
Seen in left visual field, processed in rt. hemisphere

Left hemisphere
Language/logic

Right hemisphere
Nonverbal/spatial/
musical/recognition

Methods of study

Structure
Lesions
CT scan
MRI

Function
EEG
PET scan
fMRI

The endocrine system

Pituitary—master gland
(directed by the hypothalamus)
Biochemically the same as neurotransmitters
Adrenal gland—stress hormones

DEVELOPMENT

PHYSICAL

Prenatal

Zygote
Embryo (2-8 wks)
Fetus (8+ wks)

Teratogens

Fetal alcohol syndrome
Radiation
(8-15th week, migration)
Radiation: stops short
FAS: too far

Reflexes

Moro
Rooting
Babinski
Palmar

Maturation

Cephalocaudal
Proximodistal

Puberty

Primary sex characteristics
Secondary sex characteristics
Frontal lobe development

Old age

Recall vs. recognition
Decay of fluid intelligence
Consistency of crystallized
Intelligence
Dementia
Alzheimer's disease

SOCIAL

Lev Vygotsky (social-cognitive)

Zone of proximal development
Mentors

Lorenz's study of imprinting
Harlow's research on touch
Stranger anxiety

Ainsworth's attachment theory
Strange situation paradigm
Secure attachment (60%)
Insecure attachment
Ambivalent
Avoidant

Baumrind's parenting styles

Authoritarian
Authoritative
Permissive

Erikson's stages (psychosocial)

Trust vs. mistrust
(0-1) basic trust
Autonomy vs. shame & doubt
(1-2) independence
Initiative vs. guilt
(3-5) initiation of tasks
Competence vs. inferiority
(6-12) accomplishment
Identity vs. role confusion
(13-20s) sense of self
Intimacy vs. isolation
(20s to 40s) relationship
Generativity vs. stagnation
(40s to 60s) contribution
Integrity vs. despair

COGNITIVE

Schemas

Assimilation
Accommodation

Sensorimotor stage (0-2)
Object permanence (6 mos)

Preoperational stage (2-7)
Egocentrism
Animism
Symbolic thought begins

Concrete operational stage (8-12)

Conservation
Volume
Area
Number
Reversibility

Formal operational stage (12+)

Hypothesis testing
Abstract thinking
Metacognition

Self concept
18 mo.—rouge test

MORAL

Kohlberg's theory

Preconventional morality
Avoiding punishment
Conventional morality
Accepting rules of society
Postconventional morality
Ethics, abstract morality
No absolutes
Carol Gilligan
Men - Rules & ethics
Women - Relationships

Jonathan Haidt → go to Kohlberg
Social intuitionist theory
Gut-level reactions
(limbic system)

METHODS OF STUDY

Longitudinal research
→ long-term
Cross-sectional research

STAGES OF DEATH/DYING (Kubler-Ross)

Denial ... Anger ... Bargaining ... Depression ... Acceptance

STATES OF CONSCIOUSNESS

Biology of sleep

Biological rhythms
 Circadian rhythm (25 hr cycle)
 Light (suprachiasmatic nucleus)
 Pineal gland (near thalamus)
 Melatonin
 Adenosine (sleep-inducing)

Sleep stages
 Prior to stage 1 (alpha waves)
 Stage 1 (theta waves) 5 min.
 Hypnagogic sensations
 Stage 2 (K-complexes, sleep spindles)
 Approx. 20 minutes
 Stage 3 (<50% delta waves)
 Stage 4 (>50% delta waves)
 Stage 3 & 4—slow wave sleep

Order of stages
 1, 2, 3, 4, 3, 2, REM, 2, 3, 4, 3, 2, REM

REM—paradoxical sleep
 Active brain, paralyzed body

Benefits
 Memory consolidation
 Concentration
 Mood
 Moderates hunger/reduces obesity
 Improves immune response

Disorders
 Insomnia (10-15% of adults)
 Narcolepsy
 Sleep apnea
 Night terrors (stage 4)
 Sleepwalking (stage 4)

Dreaming

Freud's analysis
 Manifest content vs. Latent content
 Information-processing theory
 Filing experience
 Synthesizing memory
 Pruning connections
 Build neural pathways
 Activation-synthesis theory
 Pons generates neural firing
 Lucid dreams
 Conscious awareness of dream state

Hypnosis

Mesmer (18th century)
 Susceptibility
 Creativity, desire influences
 Therapeutic capacity
 Posthypnotic suggestions
 Pain alleviation
 Selective attention?
 Theories:
 Social influence theory
 Emphasizes desire of subjects to do well
 Divided consciousness theory
 Emphasizes dissociation
 Hilgard's "hidden observer"

Psychoactive drugs

Tolerance/withdrawal
 Involves neuroadaptation
 Addiction

Depressants
 Alcohol
 Reduces inhibitions
 Impairs activity of frontal lobe
 Disrupts formation of LTM
 Barbiturates (tranquilizers)
 Reduce anxiety, mimic alcohol
 Opiates (endorphin agonists)
 Morphine, heroin, oxycontin

Stimulants
 Amphetamines/meth
 Cocaine—rush/crash
 Ecstasy—also a hallucinogen
 Stimulates serotonin
 Interferes w/sleep, impairs memory, reduces immune response

Hallucinogens
 LSD—serotonin agonist
 Marijuana—cannabinoid agonist
 Disrupts memory formation
 Reverse tolerance

COGNITION

Concepts

Metacognition—*wow!*
 Organization: *analyzing & then analyse*
 Hierarchies
 Prototypes

Problem solving

Barriers:
 Fixations:
 Functional fixedness
 Mental set
 Confirmation bias
 Overconfidence
 Approaches:
 Trial and error
 Insight
 Algorithm
 Heuristics
 Representativeness heuristic
 Based on prototypes
 Availability heuristic
 Based on vivid experience

Issues:
 Framing (wording)
 Belief bias
 Belief perseverance
 Illusory correlation
 Memory reconstruction
 Self-serving bias*

Intuition

Factors:
 Blindsight •
 Right-brain thinking
 Moral thinking (Hardt's theory) •
 Automatic processing/implicit memory
 Creativity
 Thin slices ← *Feeling things in narrow windows*
 Subliminal stimulation
 Microexpressions •
 Dual attitude system
 Unconscious/conscious
 Implicit/explicit
 Gut-level/rational

About Language

Structure
 Phonemes
 Morphemes
 Grammar
 Semantics
 Syntax
 Appearance
 Babbling (approx. 4 months)
 One-word stage (1 year)
 Two-word stage (telegraphic speech)
 At 1 1/2 years
 No 3 word stage

Theories of language development

Skinner—nurture
 Behaviorist explanation
 Follows usual learning pattern
 (Reinforcement/punishment)
 Chomsky—nature
 Language acquisition device (innate)
 Evidence:
 * Overregularization of language (or overgeneralization)
 Ex: "I goed to the store."
 * Common elements
 Surface structure (syntax)
 Deep structure (semantics)
 * Critical period
 Age 7 for language acquisition
 Cochlear implants
 Best results 2-4 year olds

Language & Thinking

Whorf's linguistic determinism theory (or linguistic relativity theory)
 - language shapes thinking
 Evidence: bilingual advantage
 Thinking in images (process simulation)
 Animal thinking
 * Concept formation
 * Theory of mind—similar to 2 yr. old
 * Language: honeybees, ape language

INTELLIGENCE

Theories of intelligence

It's conceptual, not a thing
(reification—assuming it's a thing)
Single intelligence theory
Spearman: "g" represents related clusters of skills (used factor analysis)
Multiple intelligence theories
* Based on evidence from savants
Thurstone: primary mental abilities
7 clusters
Gardner: 8 intelligences
- linguistic, logical-mathematical, musical, spatial, kinesthetic, intrapersonal, interpersonal, naturalistic
Stenberg's triarchic theory
- analytical, creative, practical
Emotional intelligence (EQ)
Relates to success in family, career

Neurological evidence

Brain anatomy:
Larger brain (thickening of cortex due to enhanced connections?)
17% more synapses (may be better neural plasticity?)
Einstein's brain—thicker in parietal lobe (math/spatial intelligence?)
Brain function:
Frontal lobe activity during IQ test questions
Perceptual speed correlates positively
Neurological speed (evoked brain response faster)
More efficient glucose consumption
Uses less, processes more efficiently?
Genes:
Identical twins highly correlated
Adopted children, little correlation
Heritability

Creativity

Convergent vs. divergent thinking
How to maximize:
Develop expertise
Keep a venturesome personality
Stay intrinsically motivated
Live in creative environment

Assessing intelligence

Binet's test (to identify special needs)
Terman (Stanford)
Supported eugenics (Social Darwinism)
American version (Stanford-Binet)
MA/CA X 100 = IQ
Wechsler Adult Intelligence Scale (WAIS)
Wechsler Intelligence Scale for Children (WISC)
Bias: Stereotype threat, gender bias

Creating tests

Standardization → Pine +
Representative sample, compare scores
Chart on normal curve
68-95-99.7 (standard deviation)
Flynn effect
IQ scores improving over time
Principles of test creation
Reliability: test needs to get same results each time it's given
Test-retest reliability
Split-half reliability
Validity: test needs to measure what it's designed to measure
Content validity (material reflects what should be tested)
Face validity
Criterion-related validity (matches in dependent measure of what the test is designed to measure)
Concurrent validity
Predictive validity
May be affected by range of scores tested
Construct validity (use a previous validated instrument and correlate to that test's results)
Extremes of intelligence:
Mental retardation:
Mild (50-70 IQ), moderate (35-50 IQ), Severe (20-35 IQ)
Down syndrome (extra 21st chromosome)
Gifted (Terman's study — "Termites")
Healthy, well-adjusted, successful
No tracking, special treatment in China/Japan

The basics

Sensation vs. perception
Bottom-up processing ← sensation
Top-down processing ← perception
Prosopagnosia
Thresholds
Psychophysics
Absolute threshold
Signal detection theory
Subliminal messages
Difference threshold (JND)
Weber's Law/Fechner's Law
Sensory adaptation
Transduction
Receptors

Other senses

Touch
Pressure, temperature, pain
Nociceptors
Gate-control theory
Taste (gustatory sense - chemical)
Sweet, sour, salty, bitter, umami
Taste buds
Sensory interaction
McGurk effect
Smell (olfactory sense - chemical)
Does not go through the thalamus
Direct route to limbic system
Kinesthesia
Vestibular sense
semicircular canals
Synaesthesia

SENSATION

Vision

Light energy
Wavelength (color)
Amplitude (brightness)
Parts of the eye
Cornea
Pupil
Lens
Accommodation
Retina (transduction here)
Rods (120 million)
Cones (6 million)
Fovea
Bipolar cells
Ganglion cells
Optic nerve to occipital lobe
Blind spot
Visual acuity
Nearsightedness/farsightedness
Feature detectors
Parallel processing
Blindsight
Change blindness
Retina to thalamus to cortex
Color interpretation
Young-Helmholtz theory
Subtractive color mixing
Additive color mixing
Opponent-process theory
Afterimages
Color constancy

Audition (hearing)

Sound energy
Frequency (pitch)
Amplitude (loudness)
Measured in dB (decibels)
Every 10 dB = 10 times louder
Parts of the ear
Outer ear
Pinna (visible part)
Auditory canal
Middle ear
Tympanic membrane (eardrum)
Ossicles (hammer, anvil, stirrup)
Inner ear
Oval window
Cochlea
Basilar membrane
Hair cells (transduction here)
Organ of Corti
Semicircular canals (NOT for hearing)
Auditory nerve to temporal lobe
Perceiving sound
Place theory
Frequency theory
Volley principle
Sound localization
Hearing loss
Sensorineural hearing loss
Cochlear implant
Conduction hearing loss

The basics

Sensation vs. perception
Bottom-up processing
Top-down processing
Prosopagnosia
Selective attention
Cocktail party effect
Inattentional (change) blindness
Choice blindness
Visual capture

Perceptual organization

Figure-ground relationship
Gestalt principles
Proximity
Similarity
Continuity
Connectedness
Closure

PERCEPTION

Visual perception

Depth perception
Binocular cues
Retinal disparity
Convergence
Visual cliff
Monocular cues
Linear perspective
Relative size
Interposition
Relative clarity
Texture gradient
Relative height
Light & shadow
Motion perception
Relative motion (motion parallax)
Stroboscopic movement
Phi phenomenon
Constancies
Color constancy
Size constancy
Shape constancy
Lightness constancy
Illusions
Muller-Lyer illusion
Cultural influence
Ponzo illusion
Moon illusion
Sensory deprivation
Critical periods

Other principles

Perceptual adaptation
Perceptual set
Context effects
Human factors
ESP (extra-sensory perception)?
Parapsychology
Telepathy
Clairvoyance
Precognition
Psychokinesis
Way to test: Ganzfeld procedure

LEARNING

Classical conditioning

Associative learning

- allows prediction (associate stimuli)

- respondent behavior

Pavlov's dogs (1904 Nobel prize)

* US (food) leads to:

UR (salivation to food)

* CS (bell) becomes associated with

US, leads to:

* CR (salivation to bell)

Elements of classical conditioning:

Acquisition

Extinction

Spontaneous recovery

Generalization

Discrimination

Implications:

Rescorla's research on predictability

Garcia's research of biological predis-

positions

* easier to condition food aversions

to taste rather than sight or sound

* easiest to condition behaviors that

promote survival

Applications:

Aversive conditioning—pairing a

negative stimulus with a desired

stimulus can help kick bad habits

Drug addicts sometimes have cravings

related to environment

Classical conditioning of immune re-

sponse (Ader & Cohen study)

Extinction can help cure phobias

Operant conditioning

Associative learning

- consequences of behavior

- operant behavior

Thorndike's Law of Effect

Skinner

* Operant chamber (Skinner Box)

* Shaping

- Successive approximations

* Discrimination

Reinforcement

Positive reinforcement—pleasurable

stimulus after a response (strengthens

the response)

Negative reinforcement—reduces or

removes a negative stimulus

(still strengthens the response)

* Primary reinforcers (water, food,

etc.) vs. secondary reinforcers

(money, etc.)

* Schedules of reinforcement

Continuous (rapid learning)

Partial (intermittent)

- Ratio (certain # of behaviors)

* Fixed (5 visits to restaurant =

free meal)

* Variable (slot machine)

- Interval (certain period of time)

* Fixed (ex. each day @ 3 p.m.)

* Variable (ex. shooting stars)

Punishment

Positive punishment (add bad thing)

Negative punishment (take away good)

* Both create avoidance behaviors

(ex. lie—becomes neg. reinforced)

Latest contributions

Latent learning (Tolman)

- cognitive maps (demonstrate

learning after award is given)

Intrinsic motivation (desire to do

something for its own sake)

- When rewards are given for activ-

ity that is intrinsically reward-

ing, enjoyment declines

(overjustification effect)

Extrinsic motivation (desire to do

something for reward)

- Should be recognition for a job

well done

Biological predispositions

- Easier to condition behaviors that

match natural behavior

Legacy of Skinnerian thinking

- Criticism of deterministic philoso-

phy, dehumanization, loss of

personal freedom

Observational learning (modeling)

Mirror neurons (biological basis)

- promote empathy

Bandura's Bobo doll study

Child watches adult, mimics

Increase of violence, aggression

Media influence

Violent crimes—87% on TV,

13% real life

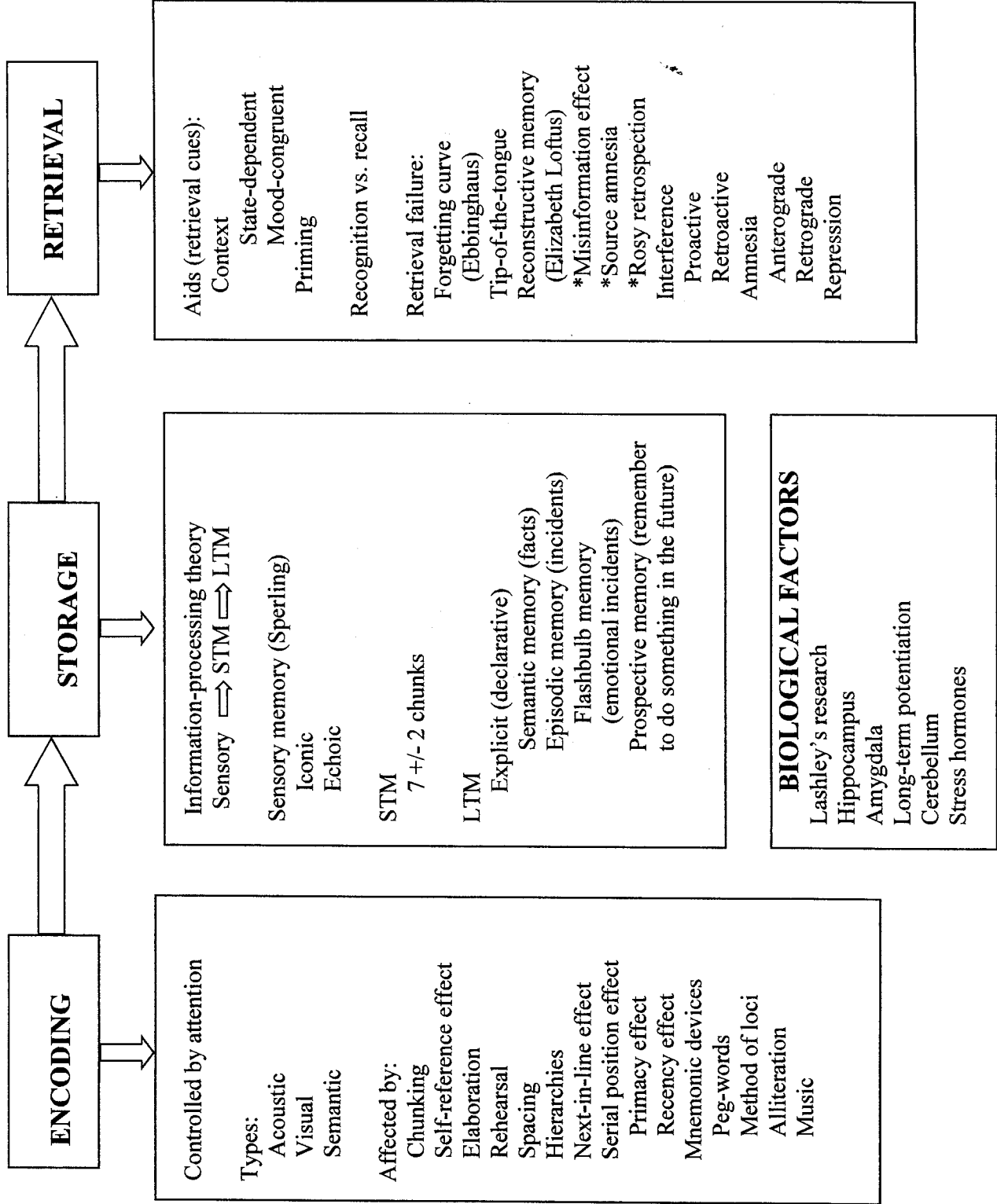
Violent action is correlated to

viewing violence (media, video

games) - leads to desensitiza-

tion

MEMORY



MOTIVATION

Physiology of hunger

Keys' research
Cannon's research
Body chemistry
Insulin up, glucose down
Hypothalamus stimulation
Lateral—hunger increases
Orexin produced
Ventromedial—hunger declines
Hormones
Ghrelin—hunger increases
PYY—suppresses hunger
Proteins
Leptin—decreases hunger
Orexin—increases hunger

Psychology of hunger

Neophobia (avoidance of unfamiliar food)
Eating disorders
Anorexia nervosa
At least 15% underweight
Continue to view self as fat
Bulimia nervosa
Binge-purge pattern
Not necessarily low weight
Obesity (30% in US)

Theories of motivation

Instinct theory (evolutionary)
- fixed patterns, unlearned
Drive-reduction theory (Clark Hull)
Object is homeostasis
- Pulled by incentives (external)
Arousal theory
Yerkes-Dodson Law
Easy task—high arousal
Difficult task—moderate
Maslow's hierarchy of needs
Physiological at base, then safety, belonging & love, esteem, self-actualization, transcendence
Need to belong
Ostracism—activates anterior cingulate cortex (also activates with pain)

Achievement motivation

Flow
I/O psychology
Personnel psychology
To avoid the interviewer illusion
Structured interviews
360-degree feedback
Grit (determination, breeds success)
Theory X vs. Theory Y
Task leadership vs. social leadership
Great person theory
Transformational leadership

Physiology of sex

Kinsey report
Masters & Johnson research
Sexual response cycle
Excitement—plateau—orgasm—resolution (refractory period)
Sexual disorders
Premature ejaculation
Erectile dysfunction
Orgasmic disorder
Hormones
Estrogen / androgens (testosterone)

Psychology of sex

External stimuli
Habituation occurs
Decreased satisfaction w/sexual partners
Gender roles/gender identity
Sexual orientation
Estimated 3-4% men, 1-2% women
But could be higher (response bias)
Identical twin studies support genetic basis
Hypothalamus differences (LeVay)
Anterior commissure differences
Fraternal birth order effect
Same sex attraction in animals (6-10%)
Finger length/fingerprint ridges (7th/16th week of development)

EMOTION

Theories

Emotion—arousal, expressive behavior, and conscious experience

James-Lange theory: physiological response 1st, emotion 2nd

Cannon-Bard theory: physiological response at the same time as experience of emotion

Schachter's two-factor theory: physiological arousal, then appraisal (cognition) creating emotion label

Spillover effect: Stirred up physiological state can be misinterpreted as emotional state

Zajonc's theory: Subliminal processing of emotions (neural pathway is from thalamus to amygdale)

Lazarus: Cognitive appraisal controls emotion

Nervous system

Autonomic arousal

Sympathetic nervous system: pupils dilate, dry mouth, perspiration, fast breathing, accelerated heart rate, slowed digestion, stress hormones released (fight-or-flight)

Parasympathetic nervous system: returns body to original calm state

Expressed emotion

Nonverbal communication

Easily detect threatening cues

Thin slices (quick views of interactions) - some better at reading

Gender differences

Women tend to be more able to read non-verbal cues

Also tend to communicate emotion better

Ekman's research

Microexpressions

Universal emotional expressions

Happiness, surprise, fear, sadness, anger, disgust

Facial feedback: we feel the emotion we show

Behavior feedback: we feel the emotion our body looks like it's feeling

Empathy: feeling another's emotion

Mirror neurons

Reading emotion: autistic people show problems in reading emotional states of others

Experience of emotion

Emotion = valence (pleasant/unpleasant) and arousal (low/high)

Fear—learn early, through conditioning, observation

- * Amygdala key
- * Anterior cingulate cortex

Anger -

Catharsis hypothesis—release

But creates more anger

Reinforcement

How to control?

Waiting to act

Exercise

Forgiveness

Happiness (subjective well-being)

- * Feel-good, do-good phenomenon
- * People who value love over money report higher life satisfaction
- * Adaptation-level phenomenon
- * Relative deprivation principle

Predictors: high self-esteem, optimism, close friendships/marriage, engaging work, meaningful faith, good sleep, exercise

Contributors: know that wealth doesn't make you happy, control your time, act happy, seek enjoyable work, exercise, sleep, make relationships a top priority, help others, be grateful, seek spiritual fulfillment

STRESS & HEALTH

Stress response

Stressor—leads to eustress or distress
 Depends on appraisal
 Fight-or-flight—Walter Cannon
 Adrenal glands
 * Epinephrine (quick response)
 * Glucocorticoids (slow response)
 General Adaptation Syndrome—Selye
 Alarm—activation of sympathetic nervous system
 Resistance—deal with/fight
 Exhaustion—breakdown of immune system (telomeres in DNA affected, can't replicate); hippocampus can't make new memories as well

Illness
 Heart (Friedman & Rosenman study)
 Type A—anger, reactive vs.
 Type B—relaxed
 69% of heart attack victims were A
 Immune system impaired
 * B lymphocytes (fight bacteria—formed in bone marrow)
 * T lymphocytes (formed in thymus, fight viruses, cancers)
 * Macrophages ("big eaters")
 Conditioning the immune system (Ader & Cohen study)
 * Sweetened water with immune suppressing drug—created classically conditioned immune suppression
 * Placebo effect in illness?

Coping

Problem-focused (address stressor)
 Emotion-focused (seeks support from others)
 Exercise
 Biofeedback
 Meditation
 Spiritual connection

Conflict

Approach-approach
 Win-win situation
 Avoidance-avoidance
 Lose-lose situation
 Approach-avoidance
 One choice, pros and cons

Obesity & health

Physiology
 Fat cells—30-40 million
 Divide if too full, can't get rid of fat cells
 Set-point/metabolism
 Fat cells—low metabolic rate
 Metabolism slows when fat cells are deprived, tries to maintain fat level

Genetics
 Adopted children's weight not correlated to adoptive parents
 Identical twins correlation +.72
 Fraternal twins correlation +.32
 Chemical effect
 Leptin in rats—when up, weight down

Losing weight?
 2/3 of women, 1/3 of men trying

PERSONALITY

Psychoanalytic

Freud's psychosexual theory
Structure: id (pleasure principle), ego (reality principle), superego (morals, ideals)
Levels of awareness: conscious, pre-conscious, unconscious
Development: oral, anal, phallic (Oedipal complex, penis envy), latency, genital
Fixations
Defense mechanisms - reduce anxiety
Repression (primary)
Regression
Reaction formation
Rationalization
Displacement
Sublimation
Projection
Denial
Neo-Freudians
Adler—social, not sexual tensions
* Birth order, inferiority complex
Horney—rejected penis envy idea
Carl Jung—collective unconscious
Assessment
Projective tests
Rorschach
TAT - Thematic Apperception Test
Draw-a-person
Sentence completion
Evaluation:
* Repression often not shown (vivid memory often results after trauma)
* Terror management theory

Humanism

Maslow—self-actualization
Hierarchy of needs
* Safety—security—love—self-esteem—self-actualization
Carl Rogers—person-centered
Genuineness
Unconditional positive regard
Empathy

Trait theory

Greeks—4 humors (choleric, sanguine, melancholic, phlegmatic)
Allport (student of Freud)
Eysenck—unstable/stable; introverted/extroverted
Costa & McCrae (Big 5)
OCEAN (openness, conscientiousness, extraversion, agreeableness, neuroticism)
Assessment
MMPI (used factor analysis, empirically derived)
Cattell's 16PF
Person-situation controversy
Walter Mischel—emphasizes power of situational factors
Expressive style—thin slices
Barnum effect—astrology, etc.

Social-cognitive

Reciprocal determinism—interplay of
Personal factors/internal cognition
Behavior
Environment
Personal control (Julian Rotter)
External locus of control
Internal locus of control
*Without internal locus, learned helplessness results
Explanatory style (Martin Seligman)
Optimistic
Unstable, specific, external
Pessimistic
Stable, global, internal
Bandura
Personality influenced by observational learning, outside influences (Bobo doll study)
Self-efficacy (belief in ability to do things that lead to positive outcomes)

The self

Hazel Markus—“possible selves”
Spotlight effect
Self-referencing effect
Self-esteem
Defensive vs. secure
Self-serving bias

PSYCHOLOGICAL DISORDERS

Medical model

Foundation

U—unjustifiable

M—maladaptive

A—atypical

D—disturbing to self or others

Measurement

DSM-IV-TR (classification of disorders) *

Axis 1—clinical syndrome?

Axis 2—personality disorder or mental retardation?

Axis 3—general med. Condition?

Axis 4—psychosocial or environmental problems?

Axis 5—global assessment of functioning (0-100)

Diagnostic labeling

Advantages:

Appropriate treatment

Stimulate research

Payment of insurance

Disadvantages:

Rosenhan's study—labeling leads to self-fulfilling prophecies? Cause interpretations of behavior?

Insanity—when?

M'Naughten rule—is the defendant

unable to distinguish right from wrong because of mental defect?

90% of those with disorders are not dangerous to others

Anxiety disorders (#7)

Panic disorder

- strikes suddenly

- panic attacks (seem like heart attacks)

- often linked to agoraphobia

Phobias—focused fear

Obsessive-compulsive disorder (OCD)

Obsessions—thoughts

Compulsions—behaviors

PTSD (post-traumatic stress disorder)

GAD (generalized anxiety disorder)

Free-floating anxiety

Source:

- Behavioral interpretation

* Classical conditioning & generalization

* Negative reinforcement maintains the fear

- Observational learning?

- Biology (natural selection, genes, activity in anterior cingulate cortex, activity in amygdale, GABA)

Dissociative disorders (#10)

Dissociative identity disorder

- multiple personality

Dissociative fugue

- person doesn't remember past, wakes up in strange location

Dissociative amnesia

- person doesn't remember past

No biological explanations

Mood (affective) disorders (#6)

Depression (common cold of disorders)

Major depressive disorder (more than 2 weeks of debilitating depression)

Dysthymic disorder (more than 2 years feeling bad most days)

Bipolar disorder

Mania (restlessness, risk-taking, craziness, fast talking) alternates with depression

- May be fast cycling or slow cycling

Explanations:

Genetic predispositions (linkage analysis, association studies)

Brain chemistry (serotonin, norepinephrine, dopamine; decreased activity in left frontal lobe)

Social-cognitive

Self-defeating beliefs (learned helplessness)

Optimistic Explanatory Style

Stable, global, internal (depressed)

Temporary, specific, external (non-depressed)

Vicious cycle of depression:

Stressful experience... leads to

Negative explanatory style... leads to

Depressed mood... leads to

More stressful experiences... and the cycle begins again

Fight depression by: changing environment, reducing self-blame, making positive predictions about the future, exercise, become focused on helping others, laugh more

DISORDERS (CONTINUED)

Schizophrenia (#5)

Considered the "cancer" of disorders
1% of population worldwide (suggests biological basis)

Involves a break with reality (psychosis)

NOT multiple personality

Common symptoms:

- * Disorganized thinking - Delusions (false beliefs)
- Paranoia (persecution)
- Word salad (bizarre speech)
- * Disturbed perceptions
- Hallucinations (auditory most often)
- * Inappropriate actions/emotions
- Reactivity
- Flat affect
- Catatonia
- Subtypes of symptoms:
- Positive symptoms (exhibit odd behavior)
- Negative symptoms (normal behavior absent)

- Either chronic (*process*)—develops slowly) or acute (*reactive*)—develops quickly)

Patterns:

- Paranoid schizophrenia
- Disorganized schizophrenia
- Catatonic schizophrenia
- Undifferentiated schizophrenia
- Residual schizophrenia

Explanations of schizophrenia

Brain abnormalities

Dopamine overactivity

- * D4 receptors 6 X normal

Glutamate—may relate to negative symptoms

Enlarged ventricles

Shrunken thalamus

Environmental factors

- * Low birth weight, famine, oxygen deprivation?

* Virus during pregnancy? Flu link during 2nd trimester

Genetic factors

- * Much higher chance of shared schizophrenia with identical vs. fraternal twins

Psychological factors/warning signs

- * Birth complications
- * Mother with schizophrenia
- * Separation from parents
- * Disruptive or withdrawn behavior
- * Poor muscle coordination
- * Poor attention span
- * Poor peer relationships/solo play
- * Emotional unpredictability

Typical onset—teens or early 20s

Personality disorders (#16)

Cluster A (eccentric)

Paranoid personality disorder

Schizoid personality disorder—odd, withdrawn behavior

Schizotypal personality disorder—with some schizophrenic-like symptoms

Cluster B (dramatic)

Antisocial personality disorder—lack of remorse, empathy (mirror neurons); typical onset about 8 yrs.

Borderline personality disorder—on the borderline of psychosis

Histrionic personality disorder—dramatic personality

Narcissistic personality disorder—extreme self-absorption

Cluster C (anxious)

Avoidant personality disorder—stays away from others

Dependent personality disorder

Obsessive-compulsive personality disorder

Somatoform disorders (#8)

Somatization disorder—body problem caused by psychological problem (ex. ulcers)

Conversion disorder—psychological problem converted to non-biological physical problem (ex. paralysis in "Heidi")

Hypochondriasis

THERAPIES

Psychoanalysis

Based on Freudian ideas
 Repressed ideas must be accessed
 Insight is the goal

Methods
 Free association
 Resistance
 Dream analysis
 Latent content most important

Transference

Duration
 Years

Psychodynamic therapy—same foundation, less intense

Humanistic

Focus: boost self-actualization (Maslow)
 Become more self-accepting

Method:
 Client-centered therapy
 - active listening (no judgment)
 Reflect feelings of client
 - non-directive

Therapist: genuineness, unconditional positive regard, empathy

Goal: promote personal growth, personal responsibility

Behavioristic

Classical conditioning applications:

- Counterconditioning—replace previous fear response with new relaxation response
- Exposure therapy (Mary Cover Jones)
- Gradual exposure to feared object
- Systematic desensitization (Wolpe)
- Anxiety hierarchy, then relaxation
- Virtual reality exposure therapy
- Implosion therapy

Includes flooding

- Aversive conditioning (substitute neg. response for unwanted behavior)

Operant conditioning applications:

- punishment (bed-wetting buzzers)
- behavior modification

* token economy

Cognitive therapy

Aaron Beck (cognitive triad)
 Albert Ellis (RET)

Stress inoculation training (change in thinking patterns to stress)

Cognitive-behavioral therapy

Group/family therapy

Saves time/money
 Humanistic foundation
 Often as effective as individual therapy

Effectiveness

People report that therapy is effective

- * But regression toward the mean?
- * Selective recall
- * Eysenck's research: 2/3 improved with or without therapy

Depression: cognitive, interpersonal, behavior

Anxiety: cognitive, exposure, behavioral

Bulimia: cognitive-behavioral therapy

Other unusual treatments:

EMDR—For trauma victims

Light exposure therapy—for SAD

Biomedical therapy

1950's—deinstitutionalization

Antipsychotic medications (D2 antagonists):
 Chlorpromazine (Thorazine) - pos. symptoms
 Clozapine (Clozaril) - negative symptoms

* Problem: tardive dyskinesia

Atypical antipsychotics (D2 & serotonin antagonists) - fewer side effects

Antianxiety meds: Xanax, Valium, Ativan (GABA agonists)

Antidepressants: also for OCD, anxiety

SSRI's—Prozac, Zoloft, Paxil, etc.

Mood stabilizers

Lithium—bipolar

Depakote—bipolar (originally for seizures)

Brain stimulation

ECT (electroconvulsive therapy)

rTMS (magnetic stimulation)

Surgery: Lobotomy (Moniz)

SOCIAL PSYCHOLOGY

Attribution theory

Internal vs. external attributions
* Fundamental attribution error
* Actor-observer bias
* Self-serving bias

Attitude change

Cognitive/affective components of attitudes (attitude vs. opinion)
Action affecting attitudes
* Foot-in-the-door
* Door-in-the-face
Persuasion
* Central route to persuasion
* Peripheral route to persuasion
Role playing (Zimbardo prison study)
Cognitive dissonance (Festinger)

Group influence

Conformity (Asch study)
* chameleon effect
* mood linkage (mimicry)
Normative social influence vs. Informational social influence
Obedience (Milgram's study)

Group behavior

Social facilitation vs. social inhibition
* related to Yerkes-Dodson Law
Social loafing
Deindividuation
* loss of identity, others don't know who you are
Group polarization
* movement to more extreme positions
Groupthink (Janus)
* influenced by desire for harmony
Minority influence
* self-confidence, determination key
Prejudice (attitude) — leads to discrimination (behavior)
* Social roots: social inequality, blame-the-victim, in-group vs. out-group leading to in-group bias
* Emotional roots: Fear, anger (leads to scapegoating)
* Cognitive roots: Categorization, availability heuristic, just-world phenomenon
* Jane Eliot study—children and stereotyping
- self-fulfilling prophecies

Aggression and conflict

Biology: genetics, amygdala, decreased frontal lobe activity, testosterone levels
Psychology
* Frustration-aggression principle
* Modeling (observational learning)
* Social scripts (mental tapes on how to act)
* Video games?
* Catharsis hypothesis (builds more anger)
Conflict
* Social traps
- pursue self-interest, everyone loses
* Enemy perceptions
- mirror-image perceptions

Attraction and altruism

Passionate love (two-factor theory)
vs. companionate love (key is equity, self-disclosure)
* Physical attractiveness key
* Similarity
* Proximity (mere exposure effect)
Altruism
Bystander affect
* diffusion of responsibility
* pluralistic ignorance
* Explained by social exchange theory
* Reciprocity norm
* Social responsibility norm
Peacemaking, GRIT
* Superordinate goals