Models of Psychopathology

Scientific Paradigms

- Paradigms are conceptual frameworks that scientists use to study the world
- Paradigms include assumptions about science and methods
- Paradigms dictate what will and will not be studied
- Paradigms can dictate the methods used by a scientist

Abnormal Behavior in Ancient Times

- Demonology, gods, and magic
- Hippocrates’ medical concepts
- Early philosophical conceptions of consciousness and mental discovery
Abnormality During the Dark Ages
- Marked by an increase of influence of churches
- Church authorities came to view witchcraft as an explanation of abnormality
  - Witches were in the league with the Devil
  - Torture was required to elicit “confessions”

Renaissance
- Resurgence of scientific questioning in Europe
- Establishment of early asylums and shrines
- Humanitarian Reformers

The Beginning of the Modern Era
- Establishing the link between the brain and mental disorder
- Early biological views
- The beginnings of a classification system
Early Views of Psychopathology

- **Somatogenesis** is the view that disturbed body function produces mental abnormality.
- **Psychogenesis** is the belief that mental disturbance has psychological origins.
The Psychoanalytic Paradigm

- The core assumption of the psychoanalytic paradigm is that abnormal behavior reflects unconscious conflicts within the person.
- The psychoanalytic paradigm is derived from the theories of personality developed by Sigmund Freud.

Freud’s Model of the Mind

- Freud suggested that the mind is composed of three parts:
  - Id is the raw energy that powers the mind
    - Id seeks gratification of basic urges for food, water, warmth, affection, and sex
    - Id processes are unconscious
  - Ego is a conscious part of the mind that deals with reality
  - Superego is the final part of the mind to emerge and is similar to the conscience.
**Freud’s Model of the Mind**

- **Intrageneric conflict**

<table>
<thead>
<tr>
<th>Type of thinking</th>
<th>Driven by</th>
</tr>
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<tbody>
<tr>
<td>Conscience</td>
<td>Moral principles</td>
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<tr>
<td>Logical-rational</td>
<td>Reasonable principles</td>
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<tr>
<td>Affective-emotional</td>
<td>Pleasure principles</td>
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**Psychosexual Development**

- Freud argued that personality develops in stages: in each stage the id derives pleasure from a distinct part of the body.
  - Oral (Birth to 18 months): infant derives pleasure from eating and biting.
  - Anal (18 months to 3 years): the focus of pleasure is the anus.
  - Phallic (3 to 6 years): the genitals are the focus of pleasure.
  - Latent (6 to 12 years): id impulses are dormant.
  - Genital: heterosexual interests are dominant.

**Defense Mechanisms**

- Anxiety results from blockade of id impulses or from fear of expression of an impulse.
- Defense mechanisms reduce anxiety:
  - Repression
  - Denial
  - Projection
  - Displacement
  - Reaction formation
  - Regression
  - Rationalization
  - Sublimation
Psychoanalysis
Goal: Insight
- Free association
- Interpretations
- Dream analysis
- Resistance
- Transference

Neo-Freudian and Modern Psychodynamic Theories
- Jung
- Adler
- Ego Psychology (Horney, Erikson)
- Object Relations (Klein, Kernberg)
- Interpersonal Therapy (Sullivan)
- Attachment Theory (Bowlby)

Critique of Psychoanalysis
- Sexual instincts as basis for all behavior
- Id, Ego, Superego
- Based on limited sample of women in Vienna
- Little evidence for success with many disorders
- Lengthy/expensive treatment
- Not based on empirical research
Freud’s Legacy

- Freud contributions include the views that:
  - Childhood experiences help shape adult personality
  - There are unconscious influences on personality
  - Defense mechanisms help to control anxiety
  - The causes and purposes of human behavior are not always obvious

Humanistic/Existential Paradigms

- Humanistic/existential paradigms focus on insight into the motivations/needs of the person
  - These paradigms place greater emphasis on the person's freedom of choice (free will)
  - The humanistic paradigm does not focus on diagnostic labeling
Assumptions of Roger’s Client-Centered Therapy

- People can only be understood from the vantage point of their own feelings (phenomenology)
- Healthy people are:
  - aware of their own behavior
  - innately good and effective
  - purposive and directive

Existential Therapy

- The existential view emphasizes personal growth
- The existential view notes that making choices results in anxiety
- Existential therapy encourages clients to confront their anxieties and to make important decisions about how to relate to others

Gestalt Therapy/Modern Experiential Therapy

- Gestalt therapists focus on the here and now and on the individual as an actor responsible for his or her role
- Modern experiential therapy combines humanistic, existential, and Gestalt approaches:
  - attending to nonverbal cues
  - empty-chair technique
  - 2-chair dialogue
Evaluation of Humanistic/Existential Approach

Pros:
- Relies upon the client's strengths, goals
- Rogers should be credited for the origination of psychotherapy research

Cons:
- Premise that humans are inherently good has been challenged
- No effort is made to determine whether the patient has the necessary skills for effective change

Behavior Paradigm

- Focus on environmental influences and observable behavior: Behaviorism
- Learning: the process whereby behavior changes in response to the environment
- Key Figures:
  - Pavlov
  - Watson
  - Thorndike
  - Skinner

Three Models of Learning

- Classical conditioning
  - Pavlov
- Operant/instrumental conditioning
  - Skinner
- Modeling/observational learning
  - Bandura
Classical Conditioning

- Unconditioned Stimulus (UCS)
- Unconditioned Response (UCR)
- Conditioned Stimulus (CS)
- Conditioned Response (CR)

Diagram:

- Initial situation:
  - bell (CS) → no salivation
  - meat powder (UCS) → salivation (UCR)

- Training trial:
  - bell (CS)
  - meat powder (UCS)

- Conditioning established:
  - bell (CS) → salivation (CR)
Operant Conditioning

- Operant conditioning
  - The likelihood of a response is increased or decreased by virtues of its consequences
- Contingency (Thorndike’s Law of Effect)
  - the association between action and consequences
- Reinforcement
  - the process by which events in the environment increase the probability of the behavior that precede it

Operant Conditioning

- Positive reinforcement
  - behaviors followed by pleasant stimuli are strengthened
- Negative reinforcement
  - behaviors that terminate a negative stimulus are strengthened
- Punishment
  - suppression of behavior by introduction of aversive consequences

Modeling

- Learning can occur in the absence of reinforcers
- Modeling involves learning by watching and imitating the behaviors of others
- Models impart information to the observer
  - Children learn about aggression watching aggressive models
Behavior Therapy

Behavior therapists use classical and operant conditioning techniques as well as modeling.
- Exposure
- Systematic desensitization
- Contingency Management
- Observational Learning

Evaluating Behaviorism

Cons:
- Oversimplification
- Determinism
- Denies Intrapersonal factors

Pros:
- Scientific
- Sensitive to Environmental Factors

The Cognitive Paradigm

Based in Information processing viewpoint
- Cognition involves the mental processes of perceiving, recognizing, judging and reasoning
- Schemas
  - Beliefs
  - Attributions
  - Expectancies
Cognitive Therapy

- Ellis
  - Rational-Emotive Therapy
- Beck
  - Cognitive Distortions
  - Negative Cognitive Triad
  - Automatic Thoughts

Cognitive Behavior Therapy

- Cognitive and Behavioral Paradigms have largely merged
- Thoughts, feelings, behaviors are all causally interrelated
- Combination of performance-based and thinking-based interventions
- Collaborative Empiricism
  - Interactive effort between therapist and client
The Biological Paradigm

The biological paradigm (medical model) suggests that alterations of biological processes result in abnormal behavior.

Biological processes may include:
- Imbalances of brain chemistry (neurotransmitters)
- Disordered development of brain structures
- Disordered genes lead to disorder (heredity)

Neuroscience and the Nervous System

- The Field of Neuroscience
- The role of the nervous system in disease and behavior
- The Central Nervous System (CNS)
  - Brain and spinal cord
- The Peripheral Nervous System (PNS)
  - Somatic and autonomic branches
Neuroscience: Neurotransmitters and Psychopharmacology

- Functions of Neurotransmitters
  - Agonists, antagonists, and inverse agonists
  - Most drugs are either agonistic or antagonistic

- Main Types and Functions of Neurotransmitters
  - Serotonin (5HT)
  - Gamma aminobutyric acid (GABA) and benzodiazepines
  - Norepinephrine and beta blockers
  - Dopamine and L-Dopa
Neuroscience and Brain Structure

- Two Main Parts
  - Brainstem and forebrain
- Three Main Divisions
  - Hindbrain
  - Midbrain
  - Forebrain
The Peripheral Nervous System

- Peripheral nervous system (PNS)
  - A network of nerve fibers leading from the CNS to all parts of the body
- Somatic Branch of PNS
  - Controls voluntary muscles and movement
- Autonomic Branch of the PNS
  - Sympathetic division
    - mobilizes the body to meet emergencies
  - Parasympathetic division
    - slows down metabolism and regulates the organs in such a way that they can do the work of rebuilding their energy supply

The Endocrine System

- Hormones
  - chemical messengers that are released into the bloodstream by the endocrine glands
  - affect sexual functioning, appetite, sleep, physical growth and development, the availability of energy, and emotional responses
- Hypothalamic-Pituitary-Adrenocortical Axis
  - HPA axis
  - Integration of endocrine and nervous system function
The major endocrine glands

**Biological Approaches to Treatment**
- The approach to treatment is usually to alter the physiology of the brain
- Drugs alter synaptic levels of neurotransmitters
- Surgery to remove brain tissue
- Induction of seizures to alter brain function
- Experience Can Change Brain Structure and Function
- Therapy Can Change Brain Structure and Function
  - Medications and psychotherapy

**Behavior Genetics**
- **Behavior genetics** is the study of how individual differences in genetic makeup contribute to differences in behavior
- **Genotype** is the total genetic makeup, composed of genes
- **Phenotype** is the observable behavioral profile
  - The phenotype can change over time as a function of the interaction of genes and environment
Methods of Behavioral Genetics

- Family studies
- Twin studies
- Adoption studies
- Molecular genetic studies

Models: An Integrative Approach

- Psychopathology is multiply determined
- One-dimensional accounts of psychopathology are incomplete
- On the horizon: innovative approaches to psychopathology (e.g., emotion frameworks)
- Must consider reciprocal relations between
  - Biological, psychological, social, experiential, cultural, and developmental factors

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