

Approaches to Psychology

The Different Approaches

- The approach used depends on the psychological topic being investigated
- Causes of schizophrenia = biological
- How infants learn = cognitive
- Six basic approaches (some include a seventh) are used

The Evolutionary Approach

- Investigates how primal survival instincts can influence behavior
- William James - founder of school of thought called Functionalism
 - Focuses on how behavior helps individuals adapt to the demands placed upon them by their environments
 - Why we do what we do
- Influenced by work of Charles Darwin – all life forms evolve by adapting

Natural Selection

- An evolutionary process in which individuals of a species that are best adapted to their environments are the ones most likely to survive; they then pass on these traits to their offspring

James's Adaptation of Darwin's Principles

- Applying Darwin's ideas to psychology, James believed:
 - The most adaptive behaviors would become habitual
 - Less useful behaviors would fade away
 - The most adaptive behaviors of a species would endure

Key Points in the Evolutionary Approach

- Psychologists in this field examine the world based on three assumptions:
 - The adaptive value of behavior
 - The biological mechanisms that make it possible
 - The environmental conditions that either encourage or discourage behavior
- Advocates of evolutionary approach, like David Buss (pictured), focus on topics like helping, altruism, mental disorders, and temperament

The Biological Approach

- Focuses primarily on the activities of the nervous system, the brain, hormones, and genetics
- Behavior and mental processes are largely shaped by biological processes
- It is not identified with any single contributor

The Biological Focus

- The brain and central nervous system
- Peripheral nervous system
 - Sensation and perception
- The influence of heredity and genetics

- The physiological basis of how we learn and remember
- The sleep-wake cycle
- Motivation and emotion
- Understanding the physical bases of mental illnesses such as depression and schizophrenia

Major Contributors

- Prominent contributions in the field of biological psychology have come from the following people:

Howard Gardner

- Studied brain damage and neurological disorders
- Created the theory of multiple intelligences
- The different types of intelligence

Hans Eysenck

- Intelligence is inherited
- Personality has a biological component
- Hierarchy of personality traits

Roger Sperry

- Pioneered split-brain surgery
- Techniques for measuring the different functions of the hemispheres of the brain
 - Proposed each sphere held separate consciousness
- First applied to patients with epilepsy

William James

- Proposed that all humans are motivated by a variety of biological instincts
 - Cleanliness, curiosity, jealousy, etc.
- Instincts are inherited tendencies
- The father of American psychology

William Virginia

Masters & Johnson

- Study of human sexuality
- They used physiological recording devices to monitor bodily changes of volunteers engaging in sexual activity
- Provided insights into sexual problems

Judith Rodin

- Work has focused on biological aspects of human behavior
- Studies on obesity led her to believe there is a genetic factor
- Studied identical twins reared apart

David McClelland

- Theorized that achievement and motivation are critical in human development

- Focused on how motives, skills, and values determine what people do with their lives
- Conducted studies on high-achieving people

Stanley Schachter

- Studies place him in many different areas of psychology
- Studied eating behavior by manipulating time and external cues

Elizabeth Loftus

- Best known for studies on human memory
- Sometimes can be flawed, such as with eyewitness testimony
- Characterized repression of memories as a “myth”

Gustav Fechner

- Developed psychophysics: the study of the relationship between sensory experiences and the physical stimuli that cause them
- Revolutionized the field of experimental psychology

David Hubel

- Nobel Prize winner (transforming sensory information into visual experiences)
- Implantation of electrodes into the cortex of a cat

Erik Kandel

- Molecular biologist and Nobel Prize winner
- Learning results in the formation of new memories
- Memory formation involves biochemical changes in the brain

Hermann Von Helmholtz

- Working with Ewald Hering, researched how color vision operates
- Helped to explain why we see things in color
 - color receptors in the retina transmit messages to the brain when visible lights of different wavelengths stimulate them

Paul Ekman

- Best known for work on human emotions and how the face expresses them
- Theorized emotion has biological component
- Human emotions are universal

The Psychodynamic/Psychoanalytic Approach

- Emphasizes internal, unconscious conflicts; the focus is on sexual and aggressive instincts that collide with cultural norms
- Examines unconscious motives influenced by experiences in early childhood and how these motives govern personality and mental disorders
- Free association and psychoanalysis

Sigmund Freud

- The “father of psychoanalysis”
- Believed the second mind, or unconscious, held key

- Filled with repressed sexual and aggressive feelings
- Cause of mental disorders
- Used free association, dream analysis to bring to surface
- Developed a theory of personality, dividing psyche into three components – the id, ego, and superego

Carl Jung

- Developed analytical psychology
- Believed unconscious to have both personal and collective component
- Claimed “archetypes,” or cultural symbols, are universal
 - Stored in collective unconscious

Alfred Adler

- Identified with “individual psychology”
- Believed people strive to overcome weaknesses (mental, physical, social)
- Compensation – the effort to overcome weaknesses
 - A positive that led helped shape personality
- Focusing too much on weaknesses may lead to feelings of inadequacy
 - Powerless to take action
 - Called this “inferiority complex”
- Believed ordinal position, or birth order, affected the personality

Anna Freud

- Applied psychoanalysis to children
- Built upon father’s idea’s relating to defense mechanisms

Erik Erikson

- A neo-Freudian
- Believed children have strong need for social approval
- Everyone passes through psychosocial crises at different developmental phases
 - Personality is shaped by how each stage is managed

The Humanistic Approach

- Emphasizes an individual’s potential for growth and the role of perception in guiding mental processes and behavior
- Belief that each person has free will and is able to make conscious choices about the direction of their lives
- Leading humanists include Abraham Maslow, Carl Rogers, and Albert Ellis

The Humanists Revolt

- Humanists felt that both behaviorist and psychoanalytic perspectives were dehumanizing
- Humanists believed that behaviorism and psychoanalysis ignored personal growth
- An optimistic view of human potential
 - Focus is more on human potential instead of problems or limitations

More Differences

- Choices are not dictated by instincts, the biological process, or rewards and punishments
- Unique perceptions of each individual are stressed
- Perception of the world influences behavior and decisions

Carl Rogers

- In the 1940s, humanism began to receive attention because of Rogers
- Human behavior is governed by each individual's "self concept"
 - One's image of him/herself
- Behavior involves the human drive for personal growth
- Believed humans continue to evolve and fulfill their potential

Abraham Maslow

- All humans have a "hierarchy of needs"
 - Begins with basics (shelter, comfort, warmth, food, etc)
 - At the top is self-actualization; the true fulfillment of potential
- Saw Abraham Lincoln and Eleanor Roosevelt as examples of self-actualized people
- Emphasis on uniqueness

Albert Ellis

- Creator of "rational-emotive therapy"
- Self-defeating thoughts cause depression and anxiety
- "I must be loved by all" is an unrealistic notion
 - Believing this dangerous and self-defeating

Criticisms of the Humanistic Approach

- Not all people have the same needs or meet them in a hierarchical fashion
- The humanistic approach is vague and unscientific

The Cognitive Approach

The Cognitive Perspective

- Studies people's mental processes in an effort to understand how humans gain knowledge about the world around them
- Cognito = Latin for "knowledge"
- How we learn, form concepts, solve problems, make decisions, use language

What Is Cognition?

- An "unobservable" mental process
- The study of consciousness, physiological determinants of behavior
- 1950s-1960s: new understanding of children's cognitive development

Wilhelm Wundt

- Used method called "introspection," self-examination, to study people's mental experiences

- Set up the first psychology laboratory
- quantifiable, measurable experiments
- Concluded people use motives and intentions to direct their attention
- Called this “voluntarism”

Edward Titchener

- Felt consciousness had three components; images/memories, sensory experience, and feelings/emotions
- Approach called structuralism – focused on nature of and interactions between each component

Jean Piaget

- Child psychologist; studied behavior by watching children
- Championed educational reforms
- Children are not “blank slates;” they create their own logic

Noam Chomsky

- Theorized that children are born with innate capacity for language, basic grammar, and sentence structure
- Transformational grammar – innate ability to receive and process grammatical information

Albert Bandura

- Presented idea that children learn behavior by watching someone else
- Called process “social learning theory” or “social learning”
- Cognitive learning theory – behavior affected through mental processes
 - “expectancies” developed based on past experiences

Lawrence Kohlberg

- “Stage theory” – attempts to explain how children acquire and refine their sense of right and wrong
- Borrowed from Piaget – moral and cognitive development tied together

Albert Ellis

- Rational-Emotive Therapy (RET) – helps people recognize and change unrealistic assumptions
- Basic premise that people essentially behave rationally
- Role playing used in therapy

Hans Eysenck

- Developed ideas about personality traits

Aaron Beck

- A cognitive therapist
- Illogical thought patterns cause a distorted view of oneself that leads to problems

Stanley Schachter

- “Misery loves company”
- Anxiety sufferers desire companionship

The Behavioral Approach

What Is Behaviorism?

- Focuses on observable behavior and the role of learning in behavior
- Behaviorism continues to influence modern psychology
- Places importance on role of reward and punishment in learning
- Look at relationship between learning and behavior

Applications of Behaviorism

- Aggression
- Drug abuse
- Self-confidence issues
- Overeating
- Criminality

John Watson

- The father of behaviorism
- Believed psychology should only study overt, measurable behavior
- Behavior should be studied scientifically
 - Avoid concepts like consciousness, feeling, and thinking
- Environment molds the behavior of us all
 - Controlling it allows for manipulation of actions

Ivan Pavlov

- Nobel Prize winner for research on digestion
- Psychic reflexes – responding the same to a conditioned stimulus and one would to a natural stimulus
- Conditioned dogs to salivate at the sound of a certain tone
 - The tone was associated with receiving food
- Classical conditioning techniques applied in therapeutic situations and to sell products

B.F. Skinner

- A strict behaviorist
- Believed behavior strongly influenced by rewards and punishments
- Using rats and pigeons in experiments, food was reward and electric shocks were punishment
- Became known as operant conditioning

Edward Thorndike

- Studied animal thinking and reasoning abilities
- Used the puzzle box to get animal to give specific response
 - Called this “instrumental” learning
- Laid the groundwork for operant conditioning

The Sociocultural Approach

- Explores how behavior is shaped by history, society, and culture

Why Has Psychology's Focus Been So Narrow?

- Cross-cultural research is costly, difficult, and time consuming
- Psychology has traditionally focused on the individual, not the group
- Cultural comparisons may foster stereotypes

Sociocultural Issues

- A combination of both psychology and sociology
 - Psychology's focus on individual behavior
 - Sociology's focus on group behavior
- Issues studied may include:
 - Ethnicity
 - Gender
 - Lifestyles
 - Income
 - Sexual orientation
 - Cults
 - Violence/aggression
 - Obedience

Stanley Milgram

- Classical experiment on obedience to authority
 - Subjects were directed to administer increasingly large shocks to an unseen "learner"
- Results showed most people would change their behavior at request of authority figure
- 65% of the subjects willingly administered what they thought to be the maximum voltage

Solomon Asch

- 1950 conformity study showed that people tend to conform to other people's ideas of truth even when they disagree with those ideas

Harry Harlow

- Challenged drive-reduction theory of motivation
 - Behavior driven by need to reduce tension or arousal
- Gave baby monkeys choice between surrogate mothers
- Showed "contact comfort" to be as important as any basic need

Albert Bandura

- Early work focused on social learning and modeling
 - People imitate behavior of those they admire
- Showed how children learn aggressive behavior

Arthur Jensen

- Believed IQ is influenced by ethnicity
- Claimed that 80% of the IQ is inherited
- Also suggested that intelligence is largely genetic in origin