

Theory & Research

Chapter 2

Cross-Cultural Research: Four Important Points

1. The study of people is real - not dry or abstract.
2. Can reveal universal patterns of behavior.
3. Impartial investigation and cultural understanding are equally important.
4. Theory and research equally important.



Basic Theoretical Terms

■ Theory

- A set of related concepts that seek to describe behavior under specific conditions
- Provide groundwork for hypotheses

■ Hypotheses

- Tentative explanations that can be tested by research

Theories of Development: Passive Development

● Mechanistic Model: Passive

- Locke: 'tabula rasa'
 - Children are 'blank slates on which society writes'
- People are machines reacting to environment

Theories of Development: Active Development

● Organismic Model: Active

Rousseau: 'noble savages'

- Children set their own development in motion

People initiate events, don't just react

Continuous Theories of Development

■ Mechanistic Theories: Continuous

- Focus on *quantitative* change
- *Same* processes are involved
 - Think of a ramp



Stage Theories of Development

- Organismic Theories: Stage
 - Focus on *qualitative* change
 - *Different* processes involved
 - Think of stairs



Theoretical Issues: An Emerging Consensus

- Development is 'Bidirectional'
 - People change their world as it changes them

Cheerful
Disposition



Positive
Responses



Freud's Psychosexual Theory

- **Psychoanalytic**
 - Unconscious forces motivate human behavior
 - *Psychoanalysis*: Therapy giving insight into unconscious emotional conflicts

Freudian Psychosexual Stages

Stage	Age	Unconscious Conflict
Oral	Birth to ~15 mos	Sucking & Feeding
Anal	12-18 mos to 3 years	Potty Training
Phallic	3 to 6 years	Attachment to Parents
Latency	6 years to Puberty	Socialization
Genital	Puberty to Adult	Mature Adult Sexuality

Freudian Parts of Personality

- **Id**
 - Pleasure Principle
- **Ego**
 - Reality Principle
- **Superego**
 - Follows rules of society

Erickson's Psychosocial Theory

- 'Neo-Freudian'
- Emphasized influence of society
- Development is lifelong, not just during childhood
- Each stage of development involves a 'crisis'
- Crisis resolution gains a 'virtue'
 - Infancy: trust vs. mistrust

Learning Theory

- **Learning**
 - Long-lasting change in behavior based on experience

Learning Theory: Behaviorism

- We respond based on whether the situation is:
 - Painful or Threatening
 - Pleasurable

Behaviorism: Classical Conditioning

- John Watson: Conditioning of Fear
- Orphan boy 'Little Albert'
 - 1. Albert liked the furry rat
 - 2. Rat presented with loud **CRASH!**
 - 3. Albert cried because of noise
 - 4. Eventually, site of rat made Albert cry



Behaviorism: Operant Conditioning

- Individual learns the consequences of 'operating' on the environment
- Learned relationship between behavior and its consequences

Operant Conditioning: Reinforcement

- **Increases** likelihood of behavior reoccurring
 - *Positive*: Giving a reward
 - Candy for finishing a task
 - *Negative*: Removing something aversive
 - No chores for getting an A+ on homework

Operant Conditioning: Punishment

- **Decreases** likelihood of behavior reoccurring
 - *Positive*: Adding something aversive
 - Getting scolded
 - *Negative*: Removing something pleasant
 - Taking away car keys
 - Getting a 'Time Out'

Bandura: Social Learning Theory

- Observational Learning or Modeling
 - Children choose models to imitate
 - Mentors, coaches, and heroes

Social Cognitive Theory: An Update to Modeling

- Emphasizes cognitive processes as central to development
- Beginning of 'self-efficacy'
- People observe models and learn 'chunks' of behavior
 - Imitating dance steps of teacher
 -AND other students

Cognitive Theory

- Focuses on thought processes
 - and behavior that reflects those processes
- Includes organismic and mechanistic theories

Piaget: Cognitive Stage Theory

- Clinical Method
 - Combining observation with questioning
- Development begins with an inborn ability to adapt
 - Rooting for a nipple, feeling for a pebble

Piagetian Cognitive Growth: Organization

- A tendency to create complex cognitive structures of 'schemes'
- Schemes
 - Organized patterns of behavior used to think and act in a situation
 - Infants suck bottles AND thumbs

Piagetian Cognitive Growth: Adaptation

- How children handle familiar information
- 2 processes:
 - *Assimilation*: Incorporating new information into existing schemes
 - *Accommodation*: Changing structures to include new information
- **These steps are balanced through *Equilibration***

Sociocultural Theory

- Lev Vygotsky
- Stresses children's active interaction with social environments
 - Unlike Piaget, considered growth 'collaborative'

Information Processing Approach

- Analyzes *processes* involved in perceiving information.
- Helps children be aware of their own mental strategies
 -and strategies for improvement!

Information-Processing Approach: Computer-Based Models

- Infers what happens between stimulus and response
- Often uses flow charts to define steps of processing that people use
- Unlike Piaget, sees development as continuous

Information Processing Approach: Neo-Piagetian Theories

- Focus on specific concepts, strategies, and skills
 - Number concepts
 - Comparisons of 'more' and 'less'

Evolutionary/Sociobiological Theory

- Uses Darwin's evolutionary theory
 - Survival of the fittest
 - Animals with traits suited to environment survive
 - These adaptive traits are passed on to offspring
 - Natural selection
 - As environments change, traits change in adaptiveness

Evolutionary Theory: Sociobiological Perspective

- Focuses on biological bases of social behavior
- Study Topics
 - Reproductive patterns
 - Altruism
 - Parenting
 - Mating Behaviors
 - Anthropology, ecology & genetics

Evolutionary Theory: Ethology

- Study of distinctive behaviors that have adaptive value
 - Innate behaviors evolved to increase survival odds
 - Think of Imprinting
 - Squirrels' burying of nuts

Evolutionary Psychology

- How biology and environment interact to produce behavior and development
- Humans unconsciously strive for personal survival and genetic legacy
 - Result: A development of mechanisms that evolved to solve problems
 - Morning Sickness actually protects fetuses

Contextual Theories

- Development is understood only in a social context
- The individual is inseparable from environment

Contextual Theory: Bioecological Theory

- Urie Bronfenbrenner
- Describes range of interacting influences that affect development
- Identifies contexts that stifle or promote growth
 - Home, classroom, neighborhood

Bronfenbrenner's Five Contextual Systems



Research Methods

Quantitative

- Objectively measurable data
 - Standardized tests
 - Physiological changes

Qualitative

- Non-numerical data
 - Feelings
 - Beliefs

Scientific Method: Quantitative Research

1. Identify Problem
2. Formulate Hypotheses
3. Collect Data
4. Analyze Data
5. Form Conclusions
6. Share Findings

Sampling



- **Sample**
 - A smaller group within the population
 - Studying the entire population is inefficient
- **Random Selection**
 - Each person in population has an equal chance of being in sample

Data Collection: Self-Reports

- **Diaries**
 - Recording daily activities
- **Interviews**
 - Research ask questions about attitudes, opinions, or behavior
 - Can be open-ended or a questionnaire

Data Collection: Naturalistic Observation

- 'People Watching'
- Behavior is observed in natural settings without interfering
- **Limitations**
 - Can not inform causes of behavior
 - Researcher cannot know all possible influences on behavior



Data Collection: Laboratory Observation

- Behavior is observed and recorded in controlled environment
- More likely to identify and control causal influences
- **Limitation:**
 - **Observer Bias:** A researcher's tendency to interpret data to fit expectations

Behavioral and Performance Measures

- **Objective measures**
 - Mechanical and electronic devices
 - Assessing skills, knowledge, and abilities
 - Heart rate
 - Brain activity
 - Intelligence tests

Meaningful Measures

- **Reliable**
 - Results are consistent from time to time
- **Valid**
 - The test actually measures what it claims to measure



Measures: Operational Definitions

- Defining what is abstract in objective terms
 - What is Intelligence?
 - A score on a test
 - Are there different kinds of intelligence?
 - Emotional intelligence
 - Academic intelligence



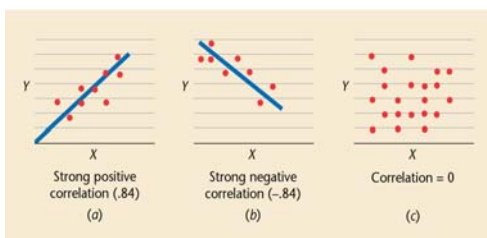
Social Cognitive Neuroscience

- Emerging field bridging mind, brain, and behavior
- Uses data from:
 - Cognitive neuroscience
 - Social psychology
 - Info-processing approaches

Research Designs

Type	Characteristics	Pros	Cons
Case Study	Study of individuals	Flexibility	Reduced generalizability
Ethnographic	Study of cultures	Universality of phenomena	Observer bias
Correlational	Positive or negative relationships	Enables prediction	Cannot establish cause & effect
Experiment	Controlled procedures	Establish cause & effect	Reduced generalizability

Correlational Studies



Experiments: Groups

- **Experimental**
 - Consists of people who are exposed to the treatment
- **Control**
 - Similar to the experimental group but do NOT receive the treatment



Experiments: Variables

- **Independent**
 - Experimenter has direct control over
- **Dependent**
 - Something that may or may not change as result of changes in independent variable



Experiments: Random Assignment

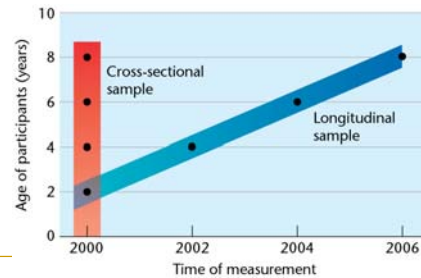
- Participants have an equal chance of placement in experimental or control group(s).
- Helps avoid unintentional differences between groups



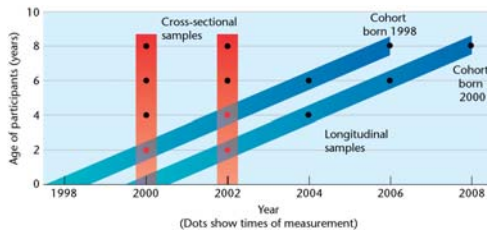
Experiments: Location

- Control over cause and effect varies depending on location:
 - **Laboratory** – most control
 - **Field** – controlled
 - Everyday settings
 - Home or school
 - **Natural** – least control

Longitudinal and Cross-sectional Designs



Sequential Designs



Ethics

- Balancing benefits of research against mental and physical risks to participants
- Considerations
 - Right to informed consent
 - Avoidance of deception
 - Right to privacy
 - Confidentiality

