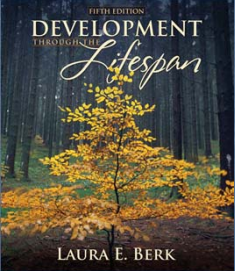


Development Through the Lifespan



10th EDITION
DEVELOPMENT THROUGH THE Lifespan
LAURA E. BERK

Chapter 1 History, Theory, and Research Strategies


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Human Development

Studying change and constancy throughout the lifespan



FamilyLife

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The Field of Human Development

Scientific
Applied
Interdisciplinary



PhotoDisc

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Theory

An orderly, integrated set of statements that

- describes
- explains
- predicts

Behavior

Must be tested and validated scientifically



Meetings and Presentations

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Basic Issues in Development

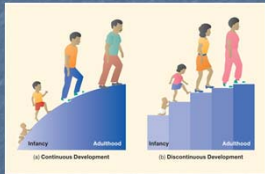
Continuous or discontinuous?

One course of development or many?

Nature or nurture?

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Basic Issues: Continuous or Discontinuous



1. **Continuous or discontinuous?**
 - a) Quantitative or Qualitative (stages)
 - b) Gradual vs. Sudden changes

Figure 1.1

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Contexts of Development

Unique combinations of

- personal (genetic)
- environment

circumstances can result in different paths of development.



Uthas Yoush

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Basic Issues: Nature and Nurture

Nature

Inborn, biological givens
Based on genetic inheritance

Nurture

Physical and social world that influences biological and psychological development

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Stability and Plasticity

Stability

Individuals high or low in a characteristic remain so at later ages.

Early experience may have lifelong impact.

Plasticity

Change is possible, based on experiences.

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Development as a Dynamic System

Perpetually ongoing process

Conception to death

Influences on development

- biological
- psychological
- social



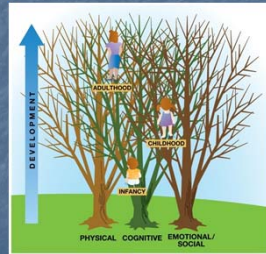
Urban Youth

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Lifespan Perspective

Development as

- lifelong
- multidimensional and multidirectional
- highly plastic
- influenced by multiple, interacting forces



Pfeiffer

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Periods of Development

Prenatal	Conception to birth
Infancy and toddlerhood	Birth to 2 years
Early childhood	2 to 6 years
Middle childhood	6 to 11 years
Adolescence	11 to 18 years
Early adulthood	18 to 40 years
Middle adulthood	40 to 65 years
Late adulthood	65 years to death

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Philosophies of Adulthood and Aging

Tetens

- Origin and extent of individual differences
- Change during adulthood - compensation for declines
- Impact of historical era on life course



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■ Carus

Identified four periods of life

- Childhood
- Youth
- Adulthood
- Senescence

Philosophies of Childhood

Medieval: Contradictory beliefs about children's basic nature

Puritan: Children as inherently evil and stubborn

- punitive approach to child-rearing

Locke: Tabula rasa

- children as blank slates shaped by experience

Rousseau: Noble savages

- children as naturally healthy and moral



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John Locke famous quote

"Let us then suppose the mind to be... white paper, void of all characters, without any ideas; how comes it to be furnished? Whence comes it by that vast store, which the busy and boundless fancy of man has painted on it with an almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer, in one word, from experience; in that, all our knowledge is founded, and from that it ultimately derives itself"

- Locke, 1690/1963 pp 82-3

Famous Watson Quote

"Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in, and I'll guarantee to take any one at random and train him to become any type of specialist I might select—a doctor, lawyer, artist, merchant-chief, and, yes, even into a beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations and race of his ancestors". [Watson, 1924, p. 10]

Major Domains of Development



Figure 1.2

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Influences on Development

Age-graded
History-graded
Nonnormative



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Resilience

The ability to adapt effectively in the face of threats to development



Sports and Recreation

Factors in resilience

- personal characteristics
- warm parental relationship
- social support outside family
- community resources and opportunities

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Key Principles of Darwin's Theory of Evolution

Natural Selection

Species have characteristics that are adapted (or fit) to their environments.

Survival of the Fittest

Individuals best adapted to their environments survive to reproduce. Their genes are passed to later generations.

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Early Scientific Study of Development

Normative Approach

- Hall, Gesell
- Measured large numbers of people
- Age-related averages

Mental Testing Movement

- Binet and Simon
- Intelligence tests

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Psychoanalytic Perspective

Conflicts

- biological drives
- social expectations

Freud and Erikson

Emphasis on unique life history

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Freud's Three Parts of the Personality

Id	<ul style="list-style-type: none">• Largest portion of the mind• Unconscious, present at birth• Source of biological needs/desires
Ego	<ul style="list-style-type: none">• Conscious, rational part of mind• Emerges in early infancy• Redirects id impulses acceptably
Superego	<ul style="list-style-type: none">• The conscience• Develops from ages 3 to 6 from interactions with caregivers

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Freud's Psychosexual Stages

Oral
Anal
Phallic
Latency
Genital



Family Life

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Erikson's Psychosocial Theory

Development is influenced by common cultural demands.
Ego – develops attitudes and skills at each stage
Each stage of development requires the solution of a crisis or psychological conflict.
Healthy development requires a favorable ratio of positive to negative.

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Erikson's Psychosocial Stages

Basic trust v. mistrust	Birth to 1 year
Autonomy v. shame/doubt	1–3 years
Initiative v. guilt	3–6 years
Industry v. inferiority	6–11 years
Identity v. role confusion	Adolescence
Intimacy v. isolation	Early adulthood
Generativity v. stagnation	Middle adulthood
Integrity v. despair	Late adulthood

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Behaviorism and Social Learning

Classical Conditioning	Stimulus–response
Operant Conditioning	Reinforcers and punishments
Social Learning	Modeling

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Learning Theories

Ivan Pavlov

- Classical Conditioning
 - Reflex
 - Stimulus – Response connection
 - Unlearned
 - Unconditioned Stimulus elicits Unconditioned Response
 - Food automatically elicits Salivation
 - Learned
 - Conditioned Stimulus elicits Conditioned Response
 - Sound of tone (paired with bacon) elicits Salivation

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Learning Theories

B.F. Skinner

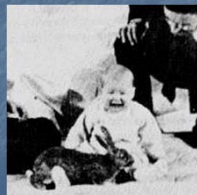
- Operant Conditioning
 - Behaviors are dependent on "Reinforcement"
 - Positive Reinforcement
 - Increased chance behavior occurs again
 - Negative Reinforcement
 - learning that occurs when behavior causes something unpleasant to stop
 - Punishment
 - Shaping
 - Extinction

Watson and Little Albert

"Conditioned Emotional Reactions" (Watson & Raynor, 1920, JEP)

Fear of white rat - making loud noise behind Albert's head whenever rat appeared
Generalized to white rabbit, fur coat, Santa Claus whiskers etc.

All fears conditioned in early childhood



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Learning Theories



Mary Cover Jones
The mother of behavior
therapy
Could conditioning
technique be used to
remove children's fears?

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Systematic Desensitization

3 year-old Peter (Cover-Jones,
1924)

Feared rabbits

Brought rabbit progressively
closer to Peter always while
child was eating

Extinguished fear to rabbit and
generalized fear response to
other objects as well



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Learning Theories

Albert Bandura

- Social Learning Theory
 - Observational Learning
 - Learning that results from seeing a model reinforced or punished for a behavior.
 - Dependent on four factors
 - Attention
 - Memory
 - Physical capabilities
 - Motivation

Vicarious Reinforcement

- We don't have to be reinforced ourselves in order to learn something
- See the consequence of other's behavior
- Visualize yet unexperienced consequence of particular behavior
- Mediating mechanism between S & R = the person's cognitive processes
- The imagined RS affects behavior more than actual RS does
- Whoever controls society's models controls behaviors

Models that Influence Human Behavior

- Person of same sex and age, peers with similar problems
- High status and prestige
- Simple behaviors more likely to be imitated than highly complex behaviors
- Hostile and aggressive behaviors strongly imitated
- Can not ignore relevance of social situations

Bandura's Bobo Doll experiment



Contributions/Limitations of Behaviorism

Behavior modification

- modeling, observational learning

Narrow view of influences

Too little emphasis on unique environmental influences

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Cognitive Theories

Jean Piaget

- *Scheme*
 - internal cognitive structure.
- *Assimilation*
 - process of using schemes to make sense of experiences.
- *Accommodation*
 - changing a scheme to incorporate new information.
- *Equilibration* –
 - balancing assimilation and accommodation

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Cognitive-Developmental Theory

Piaget

- Children actively construct knowledge.
- Adaptation to environment is made in order to achieve equilibrium.
- All children move through four broad stages.

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Piaget's Stages



Sports & Recreation

- Sensorimotor
- Preoperational
- Concrete operational
- Formal operational

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Information-Processing Theory

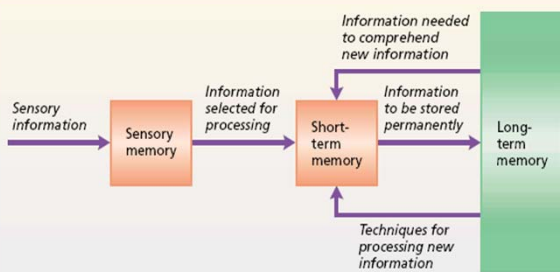
Human brain is symbol-manipulating system

- input equals experiences
- output equals behavioral response

Development seen as continuously changing, not formal stages

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Cognitive Theories



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Information-Processing Flowchart

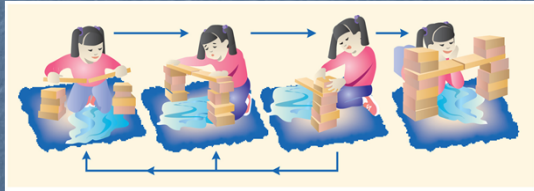


Figure 1.4

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Developmental Cognitive Neuroscience

Study of relationships between

- changes in the brain
- development of cognition, behavior

Brings together researchers from

- psychology
- biology
- neuroscience
- medicine



Business Operations

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Ethology

Study of adaptive value of behavior and its evolutionary history

- critical period
- sensitive period

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Critical Period

Individuals:

- biologically prepared to acquire adaptive behaviors during limited time span
- need support of an appropriately stimulating environment

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Sensitive Period

Optimal time
Individual is especially responsive
Later development hard to induce
Boundaries less defined



Family Life

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Evolutionary Developmental Psychology

Seeks to understand adaptive value of human competencies
Studies cognitive, emotional, and social competencies and change with age
Expands upon ethology

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Vygotsky's Sociocultural Theory

Transmission of culture to a new generation

- values, beliefs, customs, skills

Social interaction necessary

- cooperative dialogues with more knowledgeable members of society



Source: Lifesyles

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Ecological Systems Theory

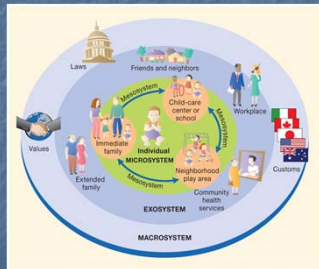


Figure 1.5

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Ecological Systems Theory

Includes all environments

- microsystem
- mesosystem
- exosystem
- macrosystem
- chronosystem

Dynamic



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Systematic Observation

Naturalistic Observation

In the "field" or natural environment where behavior happens

Structured Observation

Laboratory situation set up to evoke behavior of interest
All participants have equal chance to display behavior

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Self-Reports

Clinical Interview

Flexible, conversational style
Probes for participant's point of view

Structured Interview

Each participant is asked same questions in same way
May use questionnaires, get answers from groups

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Clinical/Case Study

Brings together a wide range of information on one person

- interviews
- observations
- test scores



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Ethnography

Descriptive, qualitative technique
Goal is to understand a culture or social group



Participant observation

- researcher lives in community for months or years

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General Research Designs

Correlational

Reveals relationships between variables

Does NOT reveal cause-and-effect

Experimental

Allows cause-and-effect statements

Lab experiments may not apply in the real world

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Correlation Coefficients

Magnitude

Size of the number between 0 and 1

Closer to 1 (positive or negative) is a stronger relationship

Direction

Indicated by + or – sign

Positive (+): as one variable increases, so does the other

Negative (–): as one variable increase, the other decreases

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Correlations

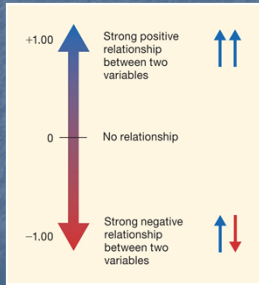


Figure 1.6

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Independent and Dependent Variables

Independent

Changed or manipulated by experimenter
Expected to cause changes in another variable

Dependent

Measured, but not manipulated, by experimenter
Expected to be influenced by the independent variable

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Random Assignment

Researchers use *unbiased procedure* to assign participants to treatment conditions.

Increases chances that characteristics will be *equally distributed* across conditions.

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Modified Experiments

Field Experiment

Capitalize on opportunities for random assignment in natural settings

Natural or Quasi-Experiment

Compare differences in treatment that already exist
Match groups as much as possible

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Developmental Research Designs

Longitudinal	Same group studied at different times
Cross-Sectional	Differing groups studied at the same time
Sequential	Several similar cross-sectional or longitudinal studies at varying times

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Sequential Design

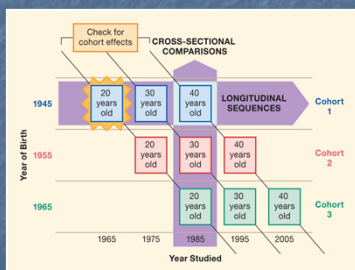


Figure 1.7

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Problems in Conducting Longitudinal Research

Participants drop out, move away
Practice effects
Cohort effects



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Use of Experimental and Longitudinal Research Strategies

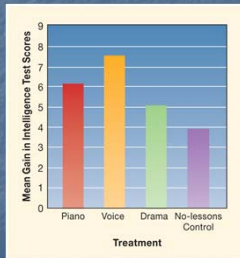


Figure 1.8

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Rights of Research Participants

Protection from harm
Informed consent
Privacy
Knowledge of results
Beneficial treatments

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