Child Growth and Development
Chapter 2: A Child’s World: How We Discover It

From Papalia and Feldman
Basic Theoretical Issues

1. Are children active or passive in their development?
   
   – Locke: *tabula rosa*, society writes onto the slate (passive)
     
     • Mechanistic, machines respond to the environment
     
     – Able to predict response to situation
   
   – Rousseau: inherently good (active)
     
     • Organismic, we initiate events, not just react. Environmental influences don’t cause development but rather influence.
Is development continuous, or does it occur in stages?

Stage theory (Discontinuity)

Continuity

(a)

(b)
2. Is development continuous or does it occur in stages?

- Mechanistic theorists see development as continuous, consistent underlying processes, prediction of later behaviors from earlier ones
  - Focus on quantitative change
    - Frequency of response made versus type of response

- Organismic theorists emphasize qualitative change, stage theorists, discontinuous
  - Each stage builds on the previous stage
  - At each stage we cope with different types of problems with different abilities
    - Death
Early theorists favored organismic or stage approaches to development

- Freud
- Erikson
- Piaget

Mechanistic view gained support in the 1960’s

- Learning theorists
  - Watson
# Five Perspectives on Human Development

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<th>Important Theories</th>
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<td>Psychoanalytic</td>
<td>Freud’s psychosexual theory</td>
<td>Behavior is controlled by powerful unconscious urges.</td>
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<td>Erikson’s psychosocial theory</td>
<td>Personality is influenced by society and develops through a series of crises.</td>
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<td>Learning</td>
<td>Behaviorism, or traditional learning theory (Pavlov, Skinner, Watson)</td>
<td>People are responders; the environment controls behavior.</td>
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<td>Social learning (social cognitive) theory (Bandura)</td>
<td>Children learn in a social context by observing and imitating models.</td>
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<td>Children are active contributors to learning.</td>
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<td>Cognitive</td>
<td>Piaget’s cognitive-stage theory</td>
<td>Qualitative changes in thought occur between infancy and adolescence.</td>
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<td>Vygotsky’s sociocultural theory</td>
<td>Children are active initiators of development.</td>
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<td>Information-processing theory</td>
<td>Social interaction is central to cognitive development.</td>
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<td>Human beings are processors of symbols.</td>
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<td>Contextual</td>
<td>Bronfenbrenner’s biocological theory</td>
<td>Development occurs through interaction between a developing person and five</td>
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<td>surrounding, interlocking contextual systems of influences, from microsystem to</td>
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<td>chronosystem.</td>
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<tr>
<td>Evolutionary/</td>
<td>Bowlby’s attachment theory</td>
<td>Human beings have the adaptive mechanisms to survive; critical or sensitive</td>
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<td>sociobiological</td>
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<td>periods are stressed; evolutionary and biological bases for behavior and</td>
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<td>predisposition toward learning are important.</td>
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1. Psychoanalytic

- **Freud: Psychosexual development**
  - Three hypothetical parts of personality
    - Id, ego, superego
      - Id present at birth seeks immediate gratification
      - Superego develops around 5-6 years, conscience, should/should nots
      - Ego: aims to find realistic ways to gratify the id that is also acceptable to the superego.
  - Unconscious motives (conflicts) direct development: inborn urges of the id and the requirement of civilized life.
  - Stages:
    - Oral (0 – 12 months)
    - Anal (12 months – 3 years)
    - Phallic (3 – 6 years)
    - Latent (6 years to puberty)
    - Genital (puberty through adulthood)
Psychoanalytic (cont)

- **Erikson: Psychosocial development**
  - Eight stages across lifespan
  - Each stage has a “crisis” to be resolved to be “healthy” and when resolved, virtue
  - Balance of a positive train with corresponding negative one
    - Positive quality should predominate but negative is needed
  - Emphasis on social and cultural influences
  - First to talk about “identity crisis”
    - Trust versus mistrust (hope) (0 – 1.5 years)
    - Autonomy versus shame and doubt (will) (1.5 – 3 years)
    - Initiative versus guilt (purpose) (3 – 6 years)
    - Industry versus inferiority (skill) (6 – 12 years)
    - Identity versus identity confusion (fidelity) (12 years – young adulthood)
    - Intimacy versus isolation (love) (young adulthood)
    - Generativity versus stagnation (care) (middle adulthood)
    - Integrity versus despair (wisdom) (late adulthood or confronting death)
2. Learning theory

   - Behaviorism
     - Classical conditioning (Pavlov, Watson)
       - Baby Albert
     - Operant conditioning (Skinner)
       - Reinforcement (behavior goes from accidental to intentional)
       - Punishment
       - Positive reinforcement: giving reward
       - Negative reinforcement: removing something not liked

   - Social learning (social cognitive: emphasis on cognitive process are central to development)
     - Bandura: reciprocal determinism, modeling
     - Through feedback on behavior, child develops sense of self-efficacy

B.F. Skinner
3. Cognitive theory

– Piaget
– Neo-Piagetian theorists
– Vygotsky
– Thought processes and behavior that reflects those thought processes
– Includes information-processing approach
– Stage theory
Jean Piaget: Cognitive Stage Theory

- Inborn ability to adapt to the environment
- Four qualitatively different stages
- Range from simple sensory and motor activity to logical, abstract thought
Organization

“schemes”

Adaptation

“assimilation” - take in new information
“accommodation” - modify thinking, more advanced

Equilibration

“striving for stable balance”
Vygotsky’s Sociocultural theory (Cognitive theory also)

- Stresses children’s active engagement with their environments
- Collaborative process with social interaction
- ZPD, zone of proximal development Gap between what child is able to do and what they are not quite ready to do by themselves (proximal = nearby)
- Scaffolding: temporary support given to a child until the child can do it alone.
• Information-Processing Approach (Cognitive theory)
  – How the brain processes information: Some theorist compare the brain to a computer. Sensory impressions go in: behavior comes out.
    • Sensory input (something you see, hear, taste, smell, touch)
    • Behavior as a result of sensory input
      – Sensation
      – Perception
      – Cognition
      – Action or behavior
    • Stimulus and response
  – Actively thinking about the world
  – Not a stage theory
  – Changes observed as a result of:
    • Speed
    • Complexity
    • Efficiency of mental processing
    • Amount of material stored
    • Variety of material stored
  – Separate physical structures for conscious and unconscious memory
  – Indicative of later intelligence based on efficiency of sensory perception and processing
4. Contextual perspective
   - Theorist see the individual, not as a separate entity interacting with the environment, but as an inseparable part of it.
     - Understood only in its social context
       • Vygotsky is also contextual
     - Bioecological theory
       • Bronfenbrenner (American psychologist)
       • Development occurs bidirectionally
       • Five interlocking contextual systems
         – Microsystem
         – Mesosystem
         – Exosystem
         – Macrosystem
         – Chronosystem
Microsystem

• Setting in which a child interacts with others everyday, face to face basis.
  – Pattern of activities
  – Roles
  – Personal relationships
  – Home
  – School
  – Workplace
  – Neighborhood
• Interaction of two or more microsystems.
  • How does home interact with school?
    – Family participation?
    – Open house?
    – Parent conferences?
    – PTA?
  • How does family interact with peer group?
    – Parties? Play dates?
Exosystem

• Linkages of two or more settings
  – Parents and work
  – Parents and social networks
  – Affects child indirectly
  – Educational system
  – Community and government agencies
  – Transit system
  – Shopping centers
  – Mass media
  – Religious hierarchy
Macrosystem

- Term for society’s overall Cultural patterns
  - Dominant values
  - Beliefs
  - Customs
  - Political systems
  - Economic systems
Chronosystem

- Term for effect of time
  - Degree of stability in child’s world
  - Degree of change in child’s world
    - Family composition
    - Place of residence
    - Parents’ employment
    - Wars
    - Economic cycles
    - Waves of migration
  - Changes in family patterns
    - Working mothers
    - Extended-family household
5. Evolutionary/Sociobiological perspective

- Wilson, influenced by Darwin
- Draws on findings from
  - Anthropology
  - Ecology
  - Genetics
  - Ethology
  - Evolutionary psychology
- Explanations of adaptation, survival, value of behavior for individuals or species
- Darwin: survival of the fittest and natural selection
• No one theory of human development is universally accepted
• No one theoretical perspective explains all facets of development
• No more “grand theories”
  – Freud and Piaget
• More smaller, limited “mini theories”
• Theories grow out of research
  – Behaviorist, social learning, and information-processing researchers
Research Methods

• Quantitative
  – Based on scientific method
    • 1. Identify a problem
    • 2. Formulate hypotheses
    • 3. Collect data
    • 4. Analyze the data
    • 5. Disseminate findings

• Qualitative
  – Open-ended
• **Scientific method**
  1. Identify a problem to be studied
  2. Formulate hypotheses
  3. Collect data
  4. Analyze data to see if hypothesis supported
  5. Disseminate findings
• **Sampling:** smaller group that would effectively represent the entire population.
  
  – **Size**
    - Too small doesn’t properly generalize
    - Too big is costly and time consuming
  
  – Adequately represent the population it will be used for
    - If looking at the effects of chocolate on women, wouldn’t collect data on men and then apply it to women
  
  – **Random selection**
    - Ensures representation
    - Difficult to obtain in large population
    - May not apply to the population as a whole
      - When looking at study habits of college students, if looking at MJC, may not apply to all college students across United States
        » Stanford
        » Chico
        » Humboldt State
• **Forms of Data Collection**

1. **Self-reports**
   - Diaries, interviews, questionnaires
2. **Naturalistic and Laboratory Observation**
   - Naturalistic observation is where children are observed in their real-life settings
     - Environment not modified or altered
     - HIGHLY PREFERRED FOR EARLY CHILDHOOD
   - Laboratory observation
     - Manipulate environment
     - Control environment
   - Neither explain why children do the things they do
   - Observer has bias, “What you look for, you will find”
3. **Behavioral and Performance Measures**
   - Mechanical and electronic devices maybe used to assess abilities, skills, knowledge, etc...
     - Less subjective than self-reports or personal observation
     - Fatigue and self-confidence affect results
   - Intelligence tests
     - Valid: measures what it says its measuring
     - Reliable: consistent from one time to another
     - Standardized: same scoring and criteria for all test-takers
     - Not, “Well, I think the child meant to say...or meant to point to...or meant to...”
     - Operational definitions: definition stated solely in terms of the operations or procedures used to produce or measure a phenomenon. Not everyone agrees but definition is clear.
Behavior and Performance Measures Cont..

- Cognitive neuroscience
  - MRI, PET, seeing the brain in action
  - Developmental cognitive neuroscience focuses on how cognitive growth occurs as brain interacts with environment
  - Social cognitive neuroscience is an emerging field that bridges the brain, mind, and behavior
    - Bringing together:
      » Cognitive neuroscience
      » Social psychology
      » Information-processing
  - Uses brain imaging and studies of people with brain injuries to figure out how neural pathways control processes such as memory and attention and in turn influences attitudes and emotions
  - This research helps to identify brain systems involved in schizophrenia, anxiety, phobias, learning disorders
Basic Research Designs

• **Case study:** one person or one family

In-depth information

  • Flexible

(Osbournes or Housewives of Orange County)
  – Rich but not generalizable
  – Doesn’t explain “why”
Basic Research Designs Cont...

• Ethnographic studies
  • Describes the pattern of relationships, customs, beliefs, technology, arts, and traditions of a society
  • Can be qualitative, quantitative, or both
  • Participant observation
• Correlational Studies
  – Looking for a statistical relationship between two variables
    • One positively increases
      – The more violent television watched, the more aggressive the child
    • One negatively decreases
      – The more education, the less dementia (Alzheimer’s)
    • Correlations help to predict
    • Correlations do NOT tell the cause (but they may suggest)
      – Correlation is not causation: ex. the more ice cream sold the more murders take place
Experiments- are controlled procedures in which the experimenter manipulates variables to learn how one affects another.

- **Controlled procedure, manipulating variables**
  - What type of television watched, how many hours watched, socioeconomic status, two-parent homes versus one-parent home, reason for one-parent home

- **Experimental group (receives treatment, reading instruction)**
  - Independent variable can be manipulated
    Influences the dependent variable

- **Control group (do not receive treatment, no reading instruction)**
  - Dependent variable may or may not change as result of independent variable

- **Random assignment ensures equal opportunity for all groups**
  - Blind study
  - Double blind study
- **Laboratory, Field, and Natural Experiments**
  - **Laboratory**: manipulate variables, control the conditions
    - Degree of control is higher
    - Degree of generalizing is lower
    - Looking for cause and effect, easier to replicate
  - **Field experiment**: more difficult to control the conditions, outside influences
    - Degree of control is lower
    - Degree of generalizing is higher
  - **Natural experiment**, correlation, unable to manipulate variables. *Ex. Casino opening on a Indian reservation in NC. Which in turn increased the income of the tribal members. Studies found a decline in behavioral disorders among the children, compared with families that did not receive increased income. Can’t prove that the income increase caused improvements in mental health.*
Developmental Research Designs

- Cross-sectional study (dominate the field of study)
  - Children of different ages assessed at one time, example: what is a woman doing for 3-, 4-, 5-, 6-year-olds
    Limited in application
    Overlooks individual differences when seen with the group
    Results may reflect cohort differences (internet)
    Speed and economy

- Longitudinal study
  - Same people followed for a long time
    Time-consuming, expensive
    Attrition (people die, move, no longer want to participate, researchers graduate from graduate programs)
    Biased: those who stay have above average intelligence and SES, repeated testing, investment in outcome

- Sequential design
  - Blending of two or the two, taken at 2 or more occasions. Provides a more complete picture of development.
Little Albert: (loud noises and white fury objects.)

Developmental considerations of children in research

• Younger children vulnerable to:
  • Stressful or unfamiliar situations
  • Absence of parent or caregiver
  • Situations arousing inappropriate shame, guilt, or embarrassment
  • Coercion, deception, or unreasonable demands

• Older children vulnerable to:
  • Apparent approval or disapproval by researcher
  • Sense of failure, threats to self-esteem
  • Expressed or implied comparisons with others
  • Implied racial, ethnic, or SES biases
  • Threats to privacy
Researchers should be guided by three principles:

- **Benefit** to participants and minimize harm
- **Respect** for participants’ autonomy and protection of those who are unable to exercise their own judgment
- **Justice**, inclusion of diverse groups

- Right to informed consent
- Avoidance of deception
- Right to self-esteem
- Right to privacy and confidentiality
“A failure is not always a mistake, it may simply be the best one can do under the circumstances. The real mistake is to stop trying.”

B.F. Skinner